

AMERICAN RAILROAD JOURNAL, AND GENERAL ADVERTISER

FOR RAILROADS, CANALS, STEAMBOATS, MACHINERY,

AND MINES.

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THE AMERICAN RAILROAD JOURNAL is the only periodical having a general circulation throughout the Union, in which all matters connected with public works can be brought to the notice of all persons in any way interested in these undertakings. Hence it offers peculiar advantages for advertising times of departure, rates of fare and freight, improvements in machinery, materials, as iron, timber, stone, cement, etc. It is also the best medium for advertising contracts, and placing the merits of new undertakings fairly before the public.

RATES OF ADVERTISING.

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One square ".....	2 50
One page, single insertion.....	8 00
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One square ".....	1 00
Professional notices per annum.....	5 00

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TROY IRON AND NAIL FACTORY, H. Burden, Agent. (See Adv.)
ROGERS, KETCHUM & GROSVENOR, Paterson, N. J. (See Adv.)
S. VAIL, Speedwell Iron Works, near Morristown, N. J. (See Adv.)
NORRIS BROTHERS, Philadelphia, Pa.
KITE'S Patent Safety Beam. (See Adv.)
FRENCH & BAIRD, Philadelphia, Pa. (See Adv.)
NEWCASTLE MANUFACTURING COMPANY, Newcastle, Del. (See Adv.)
ROSS WINANS, Baltimore, Md.
CYRUS ALGER & Co., South Boston Iron Company.
SETH ADAMS, Engineer, South Boston, Mass.
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A. & G. RALSTON & Co., Philadelphia, Penn. (See Adv.)
THOMAS & EDMUND GEORGE, Philadelphia. (See Adv.)

W. R. CASEY, CIVIL ENGINEER, NO. 23 Chambers street, New York, will make surveys, estimates of cost and reports for railways, canals, roads, docks, wharves, dams and bridges of every description, with plans and specifications. He will also act as agent for the sale or purchase of machinery, and of patent rights for improvements relating to public works.

KITE'S PATENT SAFETY BEAM.

PLAN

MESSRS. EDITORS.—As your Journal is devoted to the benefit of the public in general I feel desirous to communicate to you for publication the following circumstance of no inconsiderable importance, which occurred some few days since on the Philadelphia, Wilmington and Baltimore railroad.

On the passage of the evening train of cars from Philadelphia to this city, an axle of our large 8 wheeled passenger car was broken, but from the particular plan of the construction, the accident was entirely unknown to any of the passengers, or, in fact, to the conductor himself, until the train, (as was supposed from some circumstances attending the case,) had passed several miles in advance of the place where the accident occurred, whereas had the car been constructed on the common plan the same kind of accident would unavoidably have much injured it, perhaps thrown the whole train off the track, and seriously injured, if not killed many of the passengers.

Wilmington, Del., Sept. 28, 1840.

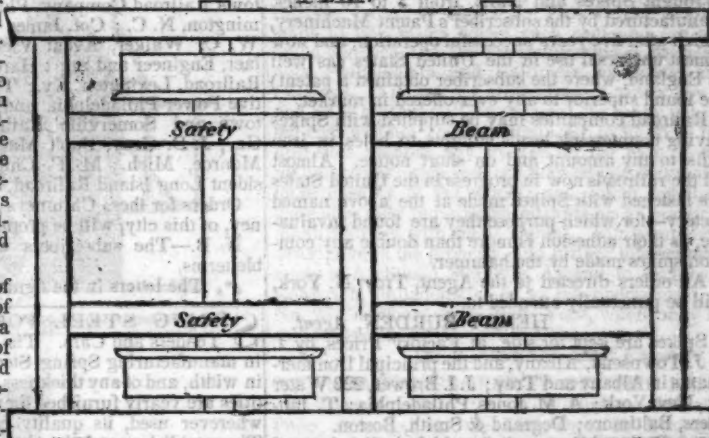
The undersigned takes pleasure in attesting to the value of Mr. Joseph S. Kite's invention of the Safety Beam Axle and Hub for railroad cars. They have for some time been applied to passenger cars on this road, and experience has tested that they fully accomplish the object intended. Several instances of the fracture of axles have occurred, and in such the cars have uniformly run the whole distance with entire safety. Had not this invention been used, serious accidents must have occurred.

In short, we consider Mr. Kite's invention as completely successful in securing the safety of property and lives in railroad travelling, and should be used on all railroads in the country.

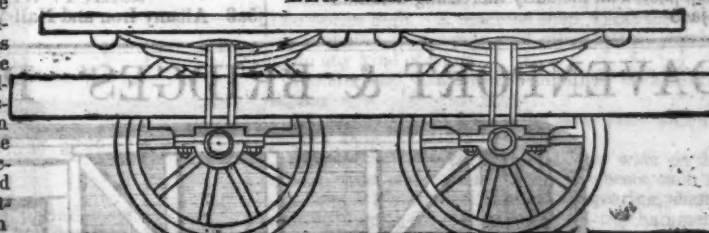
JOHN FRAZER, Agent,
GEORGE CRAIG, Superintendent.

A model of the above improvement is to be seen at the New Jersey railroad and transportation office, No. 1 Hanover st., N. York.

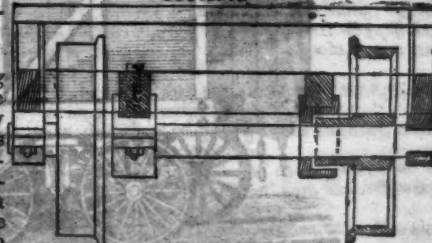
JAMES ELLIOTT, Sup. Motive Power,
W. L. ASHMEAD, Agent.



ELEVATION



Section



PATENT HAMMERED RAILROAD, SHIP and Boat Spikes. The Albany Iron and Nail Works have always on hand, of their own manufacture, a large assortment of Railroad, Ship and Boat Spikes, from 2 to 12 inches in length, and of any form of head. From the excellence of the material always used in their manufacture, and their very general use for railroads and other purposes in this country, the manufacturers have no hesitation in warranting them fully equal to the best spikes in market, both as to quality and appearance. All orders addressed to the subscriber at the works, will be promptly executed. **JOHN F. WINSLOW, Agent.**

Albany Iron and Nail Works, Troy, N. Y.
The above spikes may be had at factory prices, of Erastus Corning & Co., Albany; Hart & Merritt, New York; J. H. Whitney, do.; E. J. Ewing, Philadelphia; Wm. E. Coffin & Co., Boston.
ja45

TO IRON MANUFACTURERS. THE SUBSCRIBERS, as Agents of Mr. George Crane, of Wales, having obtained a patent in the United States for his process of smelting Iron Ore with Anthracite coal, and holding an assignment of the patent obtained by the late Rev. F. W. Geissenhainer, are prepared to grant licenses for the manufacture of Iron according to Mr. Crane's principle.

A. & G. RALSTON & CO.
ja45 No. 4 South Front st., Philadelphia, Pa.

PATENT RAILROAD, SHIP AND BOAT Spikes. The Troy Iron and Nail Factory keeps constantly for sale a very extensive assortment of Wrought Spikes and Nails, from 3 to 10 inches, manufactured by the subscriber's Patent Machinery, which after five years' successful operation, and now almost universal use in the United States (as well as England, where the subscriber obtained a patent) are found superior to any ever offered in market.

Railroad companies may be supplied with Spikes having countersink heads suitable to holes in iron rails, to any amount and on short notice. Almost all the railroads now in progress in the United States are fastened with Spikes made at the above named factory—for which purpose they are found invaluable, as their adhesion is more than double any common spikes made by the hammer.

All orders directed to the Agent, Troy, N. York, will be punctually attended to.

HENRY BURDEN, Agent.
Spikes are kept for sale, at Factory Prices, by I. & J. Townsend, Albany, and the principal Iron merchants in Albany and Troy; J. I. Brower, 222 Water St., New York; A. M. Jones, Philadelphia; T. Janviers, Baltimore; Degrand & Smith, Boston.

Railroad Companies would do well to forward their orders as early as practicable, as the subscriber is desirous of extending the manufacturing so as to keep pace with the daily increasing demand.
ja45

FRENCH AND BAIRD'S PATENT SPARK ARRESTER.

TO THOSE INTERESTED IN Railroads, Railroad Directors and Managers are respectfully invited to examine an improved **SPARK ARRESTER**, recently patented by the undersigned.

Our improved Spark Arresters have been extensively used during the last year on both passenger and freight engines, and have been brought to such a state of perfection that no annoyance from sparks or dust from the chimney of engines on which they are used is experienced.

These Arresters are constructed on an entirely different principle from any heretofore offered to the public. The form is such that a rotary motion is imparted to the heated air, smoke and sparks passing through the chimney, and by the centrifugal force thus acquired by the sparks and dust they are separated from the smoke and steam, and thrown into an outer chamber of the chimney through openings near its top, from whence they fall by their own gravity to the bottom of this chamber; the smoke and steam passing off at the top of the chimney, through a capacious and unobstructed passage, thus arresting the sparks without impairing the power of the engine by diminishing the draught or activity of the fire in the furnace.

These chimneys and arresters are simple, durable and neat in appearance. They are now in use on the following roads, to the managers and other officers of which we are at liberty to refer those who may desire to purchase or obtain further information in regard to their merits:

E. A. Stevens, President Camden and Amboy Railroad Company; Richard Peters, Superintendent Georgia Railroad, Augusta, Ga.; G. A. Nicolls, Superintendent Philadelphia, Reading and Pottsville Railroad, Reading, Pa.; W. E. Morris, President Philadelphia, Germantown and Norristown Railroad Company, Philadelphia; E. B. Dudley, President W. and R. Railroad Company, Wilmington, N. C.; Col. James Gadsden, President S. C. and C. Railroad Company, Charleston, S. C.; W. C. Walker, Agent Vicksburgh and Jackson Railroad, Vicksburgh, Miss.; R. S. Van Rensselaer, Engineer and Sup't Hartford and New Haven Railroad; W. R. McKee, Sup't Lexington and Ohio Railroad, Lexington, Ky.; T. L. Smith, Sup't New Jersey Railroad Trans. Co.; J. Elliott, Sup't Motive Power Philadelphia and Wilmington Railroad, Wilmington, Del.; J. O. Sterns, Sup't Elizabethtown and Somerville Railroad; R. R. Cuyler, President Central Railroad Company, Savannah, Ga.; J. D. Gray, Sup't Macon Railroad, Macon, Ga.; J. H. Cleveland, Sup't Southern Railroad, Monroe, Mich.; M. F. Chittenden, Sup't M. P. Central Railroad, Detroit, Mich.; G. B. Fisk, President Long Island Railroad, Brooklyn.

Orders for these Chimneys and Arresters, addressed to the subscribers, or to Messrs. Baldwin & Whitney, of this city, will be promptly executed.

N. B.—The subscribers will dispose of single rights, or rights for one or more States, on reasonable terms.
FRENCH & BAIRD.
Philadelphia, Pa., April 6, 1844.

.. The letters in the figures refer to the article given in the Journal of June, 1844. ja45

SPRING STEEL FOR LOCOMOTIVES.

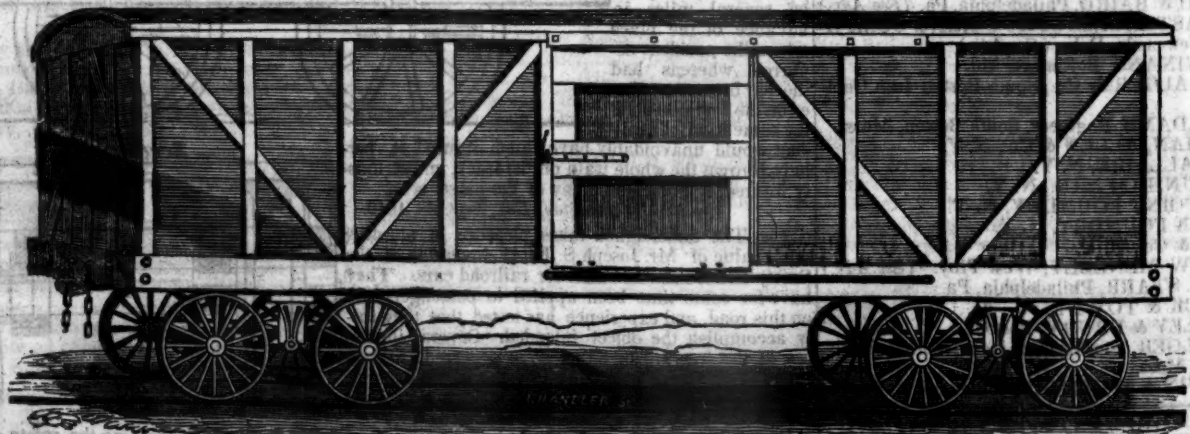
Tenders and Cars. The Subscriber is engaged in manufacturing Spring Steel from 1 1/4 to 6 inches in width, and of any thickness required: large quantities are yearly furnished for railroad purposes, and wherever used, its quality has been approved of. The establishment being large, can execute orders with great promptitude, at reasonable prices, and the quality warranted. Address

JOAN F. WINSLOW, Agent,
ja5a3 Albany Iron and Nail Works, Troy, N. Y.

SAMUEL NOTT, CIVIL ENGINEER, Surveyor and General Agent, Bangor, Me. Railroads, Common Roads, Canal, Factory and Mill Sites, Towns, Farms, Wild Land, etc., surveyed. Plans and Estimates for Buildings, Bridges, etc., prepared, and all appertaining business executed.

— REFERENCES —
Boston, { Col. James F. Baldwin, Civil Engineer.
Col. J. M. Fessenden, " "
Wm. Parker, Esq., Engineer and Superintendent
Boston and Worcester railroad. ja45

DAVENPORT & BRIDGES' PATENT CAR AND TRUCK.



DAVENPORT & BRIDGES CONTINUE TO MANUFACTURE TO ORDER, AT THEIR WORKS, IN CAMBRIDGEPORT, MASS. Passenger and Freight Cars of every description, and of the most improved pattern. They also furnish Snow Ploughs and Chilled Wheels of any pattern and size. Forged Axles, Springs, Boxes and Bolts for Cars at the lowest prices. All order punctually executed and forwarded to any part of the country. Our Works are within fifteen minutes ride from State street, Boston—coaches pass every fifteen minutes.

RAILROAD IRON AND LOCOMOTIVE
Tyres imported to order and constantly on hand
by **A. & G. RALSTON**
Mar. 20th 4 South Front St., Philadelphia.

THE NEWCASTLE MANUFACTURING
Company continue to furnish at the Works, situated in the town of Newcastle, Del., Locomotive and other steam engines, Jack screws, Wrought iron work and Brass and Iron castings, of all kinds connected with Steamboats, Railroads, etc.; Mill Gearing of every description; Cast wheels (chilled) of any pattern and size, with Axles fitted, also with wrought tires, Springs, Boxes and bolts for Cars; Driving and other wheels for Locomotives.

The works being on an extensive scale, all orders will be executed with promptness and despatch. Communications addressed to Mr. William H. Dobbs, Superintendent, will meet with immediate attention.
ANDREW C. GRAY,
ja45 President of the Newcastle Manuf. Co.

CUSHMAN'S COMPOUND IRON RAILS.
etc. The Subscriber having made important improvements in the construction of rails, mode of guarding against accidents from insecure joints, etc.—respectfully offers to dispose of Company, State Rights, etc., under the privileges of letters patent to Railroad Companies, Iron Founders, and others interested in the works to which the same relate. Companies reconstructing their tracks now have an opportunity of improving their roads on terms very advantageous to the varied interests connected with their construction and operation; roads having in use flat bar rails are particularly interested, as such are permanently available by the plan.

W. Mc. C. CUSHMAN, Civil Engineer,
Albany, N. Y.
Mr. C. also announces that Railroads, and other works pertaining to the profession, may be constructed under his advice or personal supervision. Applications must be post paid.

TO RAILROAD COMPANIES AND BUILDERS OF MARINE AND LOCOMOTIVE ENGINES AND BOILERS.

PASCAL IRON WORKS.

WELDED WROUGHT IRON TUBES

From 4 inches to 4 in calibre and 2 to 12 feet long, capable of sustaining pressure from 400 to 2500 lbs. per square inch, with Stop Cocks, T, L, and other fixtures to suit, fitting together with screw joints, suitable for STEAM, WATER, GAS, and for LOCOMOTIVE and other STEAM BOILER FLUES.



Manufactured and for sale by
MORRIS, TASKER & MORRIS.
Warehouse S. E. Corner of Third & Walnut Streets,
PHILADELPHIA.

RAILROAD IRON.—THE MARYLAND AND NEW YORK IRON AND Coal Company are now prepared to make contracts for Rails of all kinds. Address the Subscriber, at Jennon's Run, Allegheny County, Maryland.
WILLIAM YOUNG,
ja451m President.

TO IRON MASTERS.—FOR SALE.—MILL SITES in the immediate neighborhood of *Baltimore* *Coal and Iron Ore*, of the first quality, at Ralston, Lycoming Co., Pa. This is the nearest point to tide water where such coal and ore are found together, and the communication is complete with Philadelphia and Baltimore by canals and railways. The interest on the cost of water power and lot is all that will be required for many years; the coal will not cost more than \$1 to \$1.25 at the mill sites, without any trouble on the part of the manufacturer; rich iron ore may be laid down still more cheaply at the works; and, taken together, these sites offer remarkable advantages to practical manufacturers with small capital. For pamphlets, descriptive of the property, and further information, apply to Archibald McIntyre, Albany, to Archibald Robertson, Philadelphia, or to the undersigned, at No. 23 Chambers street, New York, where may be seen specimens of the coal and ore.

W. R. CASEY, Civil Engineer,

VALUABLE PROPERTY ON THE MILL Dam For Sale. A lot of land on Gravelly Point, so called, on the Mill Dam, in Roxbury, fronting on and east of Parker street, containing 68,497 square feet, with the following buildings thereon standing.

Main brick building, 120 feet long, by 46 ft wide, two stories high. A machine shop, 47x43 feet, with large engine, face, screw, and other lathes, suitable to do any kind of work.

Pattern shop, 35x32 feet, with lathes, work benches, &c.

Work shop, 86x35 feet, on the same floor with the pattern shop.

Forge shop, 118 feet long by 44 feet wide on the ground floor, with two large water wheels, each 16 feet long, 9 ft diameter, with all the gearing, shafts, drums, pulleys, &c., large and small trip hammers, furnaces, forges, rolling mill, with large balance wheel and a large blowing apparatus for the foundry.

Foundry, at end of main brick building, 60x46 feet two stories high, with a shed part 45x20 feet, containing a large air furnace, cupola, crane and corn oven.

Store house—a range of buildings for storage, etc., 200 feet long by 20 wide.

Locomotive shop, adjoining main building, fronting on Parker street, 54x25 feet.

Also—A lot of land on the canal, west side of Parker st., containing 6000 feet, with the following buildings thereon standing:

Boiler house 50 feet long by 30 feet wide, two stories.

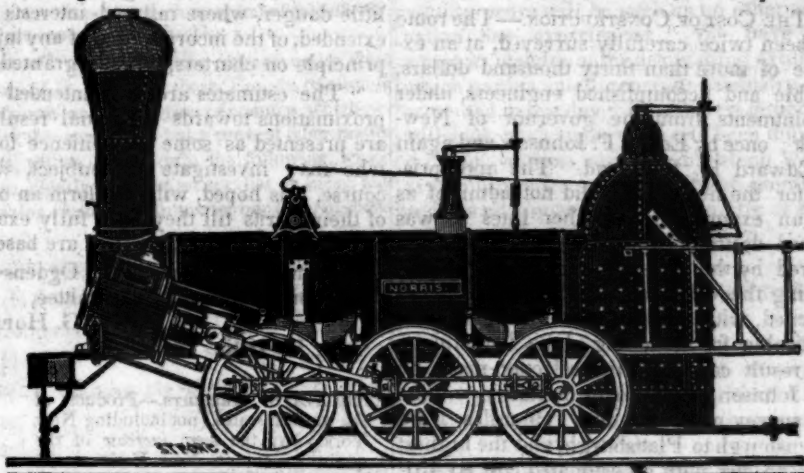
Blacksmith shop, 49 feet long by 20 feet wide.

For terms, apply to **HENRY ANDREWS, 48 State st.,** or to **CURTIS, LEAVENS & CO., 106 State st., Boston,** or to **A. & G. RALSTON & Co., Philadelphia.**
ja46

CYRUS ALGER & CO., South Boston Iron Company.

NORRIS' LOCOMOTIVE WORKS.

BUSH HILL, PHILADELPHIA, Pennsylvania.



MANUFACTURE their Patent 6 Wheel Combined and 8 Wheel Locomotives of the following descriptions, viz:

Class 1,	15 inches Diameter of Cylinder,	× 20 inches Stroke.
" 2,	14 " " " " " "	× 24 " " "
" 3,	14 1/2 " " " " " "	× 20 " " "
" 4,	12 1/2 " " " " " "	× 20 " " "
" 5,	11 1/2 " " " " " "	× 20 " " "
" 6,	10 1/2 " " " " " "	× 18 " " "

With Wheels of any dimensions, with their Patent Arrangement for Variable Expansion. Castings of all kinds made to order: and they call attention to their Chilled Wheels for the Trucks of Locomotives, Tenders and Cars.

NORRIS, BROTHERS.

Northern, or Ogdensburgh and Lake Champlain Railroad.

We have had upon our table, for several days past, a pamphlet containing much interesting and useful information in relation to the business operations of the northern part of the state of New York, lake Ontario and Canada—in connection with the railroad from Ogdensburgh to lake Champlain. The pamphlet appears to have been prepared expressly for the Boston market, towards which city all favorable projects and meritorious enterprises seem now to be attracted. The pamphlet appears to have been prepared by Mr. J. G. Hopkins. It has been got up with great care, and will be likely to effect the object in view, viz. to draw the attention of Boston capitalists, and business men to the advantages which this road will be likely, in connection with the Vermont railroad to Burlington, to afford them. We are well convinced that there are very few people who justly appreciate the amount of business which is sure, in a few years, to float upon lake Ontario. The boundless and fertile west will furnish an amount of produce, almost beyond ordinary comprehension; a large part of which must reach the Atlantic states, through the medium of the lakes, railroads and canals, and when once loaded into lake vessels it will be likely to seek that point nearest to the place of its destination, and from whence it can be most cheaply and speedily transported before it will be unloaded. That designed for New York will find an outlet at Oswego, either by the canal, or the railroad that is soon to be, while all that is destined for the interior of New England, much even for Boston itself will be landed at Ogdensburgh, and pass over the Northern railroad to lake Champlain, thence to Boston and throughout New England by railroads.

The length of the road is by one line surveyed 120 miles, and the highest grade 40 feet to the mile, and by the other line 121½ miles—the estimated cost of the first line is \$1,778,459—and of the other \$1,923,108—but we advise them to fix their minds upon a road which shall not cost less than \$2,500,000 when in complete running order. Begin right—persevere and then it will be sure to come out right.

We make a few extracts to show the business, and its annual increase on the N. Y. canals.

"The tonnage of products, sent to tide water on the N. Y. canals in 1844, was 1,019,025 tons, valued at more than \$34,000,000, and that 176,737 tons of merchandize was sent from tide water on those canals in the same year. We have been moderate enough to claim for Boston only a small share of the increase of that trade, as has been seen, which render our road a very productive one.

"The average increase of tonnage arriving at tide water from the west, by the Erie canal, is 161,031 tons per year, for the last ten years. Of this annual increase, 150,084 tons are agricultural products.

"The number of tons merchandize which ascended the New York canals from tide water in 1844, was 135,616, and including coal, &c., was 176,737, and the year previous, 143,595. If Boston should send over the Ogdensburgh road 20,000 tons of merchandize to the west, it would be but little more more than half the mere increase of the whole number of tons going on the canals from tide water, the last year, and less

than the increase of the year previous. If we include eastern manufactures, to which this road would open a direct market in the west, the goods of emigrants to the west and to Canada, and merchandize to the western states and to Canada which will open some trade to Boston as will yet be seen, it cannot be extravagant to set down all this trade at 20,000 tons."

We give the following in relation to the character of the route, surveys and estimates of business upon the road, that our readers may have a better idea of the project. The estimates in relation to the business which will pass over the road should be taken with some grains of allowance—not however as over but rather as under estimated if we take an average of 7 years from its completion.

"THE COST OF CONSTRUCTION.—The route has been twice carefully surveyed, at an expense of more than thirty thousand dollars, by able and accomplished engineers, under appointments from the governor of New York; once by Edwin F. Johnson, and again by Edward H. Brodhead. The appropriation for the first survey did not admit of as full an examination of other lines as was deemed desirable, and a further survey was ordered by the legislature in 1840, without limiting the expense. The line was again surveyed, with all other routes deemed at all practicable for reaching lake Champlain. The result confirmed the selection made by Mr. Johnson, with slight variations. The first survey made the line 119 miles from Ogdensburgh to Plattsburgh, and the highest grade 45 feet, with an estimated cost \$1,451,805. Mr. Brodhead, having more time for examination, was enabled, by extending the line, to reduce the highest grade to 40 feet in the mile. He surveyed two routes for part of the distance, making the line 120 miles on one, with an estimated cost of construction \$1,778,459, and the other 121½ miles, to cost \$1,923,108.

An examination of the very able and full reports of the engineers, and the maps and profiles, must show satisfactorily that the surveys have been made with great care. And when the favorable character of the soil, (ascertained by frequent shafts,) and the uniformity of the surface, and the cheapness of materials, are considered, it will not excite surprise, when the opinion is expressed that the road may be finished with a substantial freight track within the estimates. Very little expense will have to be incurred, it is believed, in obtaining the land for the roadway. The route is also through a country of great uniformity of surface, and known there to be peculiarly free from deep snows and snow-drifts, and little interruption will ever arise from this source. The estimates do not include the cost of engines, cars, &c.; and if, in addition to this expense, and for the purpose of furnishing the most ample accommodations for transporting so great an amount of freights as is expected to pass on the road, the outlay of capital should be larger than has been anticipated, it is believed that the

receipts will still afford a large profit upon the investment. It will be seen that the profits resulting from the estimates made are sufficient to admit of much abatement on account of errors, if any, in the estimates, either of cost of construction or of business, and also for reduction of prices of freight, if found necessary or desirable.

The charter extends fifty years, and is a liberal one, adopting that of the Attica and Buffalo company, whose road, built, it is believed, principally with Boston capital, has for some years been in successful operation. It has been seen that the stockholders will be well protected in their privileges by the provision of the constitution, which prevents any alteration except by the votes of two-thirds of all the members elected to each branch of the legislature. Since this is the case, and absence is the same as a negative vote, there is little danger, where railroad interests are so extended, of the incorporation of any injurious principle on charters, already granted.

"The estimates are only intended as approximations towards the actual results, and are presented as some convenience to those who may investigate the subject, who of course, it is hoped, will not form an opinion of their merits till they have fully examined the grounds upon which they are based.

Submitted in behalf of the Ogdens- }
burgh Railroad Committee, }
G. HOPKINS.

JULY 15, 1845.

	Tons.
ESTIMATES OF FREIGHTS.—Products of the western states, (not including New York,) say the mere increase of the quantity sent on New York canals from the western states the last year, and being only one quarter of the increase of the whole quantity, (including New York,) sent on the canals to tide water that year, (and believed to be a mere approximation of what it will be,) 51,649, say	50,000
Merchandize and eastern manufactures going to western states and Canada, (including goods of emigrants, and goods imported under the recent act of congress,) being less than the increase of merchandize that ascended the New York canals from tide water the last year.....	20,000
From western New York.—Ground plaster, salt, flour, fruit, &c., going to lake Champlain and eastern states,	8,000
From northern New York.—Timber, sawed lumber, staves, shingles, &c., going to lake Champlain or beyond, estimated average for 10 years.....	50,000
Pig and bar iron, nails, stoves, castings, &c., products of iron mines, estimated to pass on the road as soon as constructed, (and will probably be much more,)	5,000
Pot and peal ashes, stone, marble, lime, water lime, glass, beef, pork, live cattle, butter, cheese, venison, poultry, &c., sent to market.....	15,000
Merchandize, eastern manufactures, fish, goods of emigrants, &c., coming into New York, and salt, flour, plaster, from Ogdensburgh and other local and way freight to places on the road,	1,000
	Tons, 158,000
Passengers.—Average number of through passengers on 12 railroads in New	

York, being all that were reported, and including the poorest, and most unprofitable roads in the state..... 56,308
Do. way passengers, (calling 4 equal to one through) 4) 28,894..... 7,227

63,535

Profits.—63,535 passengers at \$2.50 per head, being only about 2 cents per mile, (low enough to induce thousands more to take this route)..... 157,787

Transportation of the mails..... 6,000

158,000 tons freight at \$2.50 per ton, (much of it would bear higher, and some going to the sea-board might have to be taken at lower rates)..... 395,000

552,787

Average expense of repairs and running on the above 12 railroads in New York per mile is \$1290, which for 120 miles is..... 154,800

Net receipts \$403,987

Being over 20 per cent. on a capital of \$2,000,000, and 16 per cent. on \$2,500,000.

We should like to give the extracts entire from the letters of H. A. S. Dearborn, Esq., in relation to Ogdensburgh and that region of country, which accompany this exposition but a press of other matter prevents, yet we cannot omit the following, which show so clearly that the writer has a clear and far reaching view of the future for our favored country.

OGDENSBURGH AND ITS ADVANTAGES.

Extracts from "Letters on the Internal Improvements and Commerce of the West, by H. A. S. Dearborn," written at Buffalo, after visiting the different parts of the state.

"Ogdensburgh, says Gen. Dearborn, has, within the immediate surrounding country, invaluable sources of wealth, which will render that town the most eminent for its extent of business and population of any between Montreal and Oswego, should neither of the proposed channels of transportation be formed, (alluding to the proposed railroad to lake Champlain, and the extension of the Black River canal, &c.) but if completed, its rapid rise in the commercial prosperity and consequence is beyond all doubt. The harbor is excellent, and may easily be rendered more capacious and secure at but little expense, compared with the business which will there be concentrated in the progress of events which are daily becoming of greater import with the general march of internal improvements.

"The town is situated on the St. Lawrence, at the mouth of the Oswegatchie. The Oswegatchie has many tributary streams, which extend into the St. Lawrence, Jefferson, Lewis, and Herkimer counties, and four or five miles above Ogdensburgh, it receives the waters of Black lake, twenty-four miles long, navigated by steam and other boats, and thus becomes a means of communication with a large tract of the country. Below the junction are two rapids, and a very considerable fall near the mouth of the river, furnishing most valuable hydraulic powers, that are already used to a considerable extent, there being two large flour, two grist, and two saw mills, three foundries, extensive distilling and

tanning establishments, machine and other factories.

"That there will be a canal or railroad from Ogdensburgh to lake Champlain, and that soon, is certain.

"The numerous natural and artificial lines of communication, which I have attempted, but very imperfectly, to describe, and which concentrate in the valley of the Hudson, exhibit the wonderful influence which the Erie canal has already produced.

"What an exciting and glorious spectacle to the public works of this peculiarly favored state present. The prospective results, from the mighty causes which are and soon will be in full action, are far beyond what the most gifted prescience can predict, not merely as relates to this rich section of country, and its appendant regions, but to the whole republic. The magnificent revelation of coming years will be such as no other age or nation has experienced. We have been wrapt in wonder at the astonishing exhibition which genius, intelligence, and industry, have presented in our day; but the next generation will look back upon what has been done and is doing, with an amazement which will be as much greater as the extent of population and its advancement in all the arts of civilization will exceed what now exists."

Atmospheric Railway.

The New Orleans Picayune has the following paragraph in relation to the Kingston and Dalkey—not "Dublin" Atmospheric Railway. "The trials of the atmospheric railway at Dublin have shown that a much greater quantity of fuel will be required than by the locomotive system. It is also found very difficult to remedy the leakage in the long valve which covers the slit in the upper surface of the pipe. From the first we had no faith in this "atmospheric" business.—The obvious physical difficulties in the way of its success are almost as clear as those which prevent communication by balloons and flying-machines."

Such however are not the conclusions of those who have the immediate charge of the working operations of that line. We find, in the proceedings of a special meeting of the London and Croyden Atmospheric Railway Co., held on 4th. July ult., the following remarks, by the chairman W. W. Wilkinson Esq., which are to the point.

"It had been industriously circulated that they (the Croyden directors) had misgivings as to the success of the atmospheric principle, and that that was the reason why they had not opened the line, being fearful of the result of the experiment becoming known. The reason was, that all things were new, and although they had proceeded at once to make a contract for the pipes, etc., with one of the first houses, yet they had been disappointed in obtaining them, (from the cause he had stated) so soon as was expected; but he had every hope that they would be enabled to open before the end of July. Nothing had happened whatever to shake their confidence in the success of the system, and he was surprised—perhaps he had no right to say surprised—he was astonished that du-

ring the investigations that had been going on during the present session, nothing better had been shown against the system. All that was said was, that what they had done could not be done. They had been materially assisted by the valuable testimony of Mr. Gibbon, the engineer of the Kingstown and Dalkey line, who had given evidence that even as late as last Sunday week, he believed on the occasion of the arrival of the *Great Britain*, 5,000 persons passed over the line. They began first by running trains every half hour, then every quarter of an hour, and finally every ten minutes, and continued throughout the day without the slightest irregularity, though they lost two or three of the locomotive trains which was acting in conjunction with them, so that he considered that that showed that it would bear favorable comparison even with the locomotive.

There is too much truth in the following remark of Mr. Wilkinson, in relation to new propositions, or systems. The real merits are not sought for, but "public opinion" is, and too often as popular opinion sets so goes the press, instead of investigating the matter, ascertaining as near as possible the truth, and then enlightening public opinion. "He, Mr. Wilkinson, would caution them generally not to be misled by its being stated, as he had no doubt it would be, when they opened, that the system had failed, because, being new, they had almost the whole of the press against them. The press was so, being the representatives of public opinion—and the public being generally against them, because they mostly had an interest in the locomotive, and it was feared that this principle would interfere with some vested interest. He advised them, therefore, to be patient, and trust to their talented engineer for the result."

The first portion of the Croyden Atmospheric line, Mr. Cubitt stated would be ready either the end of this month, or the first week in August.

Canals turning into Railways.—The plausible project says the Ledger, of running a railroad along the line of our canals between this city and Pittsburg, in connection with the Columbia and Portage railroads, thus connecting the two cities by an iron band and reducing the time of travel between them two thirds is not without similar examples in Europe. The London Times of the 2d ult. has a notice of a meeting in London of the proprietors of the Kennet and Avon canal, at which it was unanimously resolved to take measures to ascertain the practicability of converting that canal into a railway. Steps have been taken for the conversion of the Ellesmere and Chester, and the late Birmingham and Liverpool junction canals into railways. The advantages which railways possess over canals of being available the entire year—in time of ice as well as of drought—and the greater expedition with which distance may be achieved over them, mark them out as the kind of intercommunication, for freight and passengers, likely to find favor in this country, or, indeed, anywhere. We have seen the last canal, of any magnitude that will ever be constructed in the United States.

ENGLISH RAILROAD SHARE-LIST.

NAME OF RAILWAY.	Miles opened.	Total sums, in pounds, authorized to be raised by shares.	Total sums, in pounds authorized to be raised by loan or mortgage.	Total sums, in pounds expended at dates of latest balance sheets.	Cost of working in pounds for six months as stated in latest balance sheets.	Total earnings, in pounds, for six months as stated in latest balance sheets.	Dividend at last meeting.		Paid on shares.	Value of share.	NEW AND PROPOSED RAILWAYS.	Share Capital.
							Per share.	Per cent. per annum.				
Arbroath and Forfar.....	15	102,000	35,000	138,870			0 12 6	2 10 0	25	20	Aberdeen.....	1,600,000
Birmingham and Gloucester.....	55	1,187,500	407,336	1,500,806	39,261	53,203	1 5 0	2 10 0	100	100	Barnsley Junction.....	200,000
Branding Junction.....	23	161,700	365,470	481,452				4 10 0	50	54	Belfast and Ballymena....	385,000
Bristol and Gloucester.....	37	400,000	211,000	657,825				nihil.	30	59	Blackburn and Accrington..	400,000
Chester and Birkenhead.....	14	750,000	143,170	518,989	5,856	13,148	0 10 2	0 0	50	60	Birk. and Ches. Junction...	1,000,000
Dublin and Drogheda.....	31	450,000	150,000	582,254				nihil.	60	115	Bolt. Wigan and Liverpool	800,000
Dublin and Kingston.....	6	200,000	152,200	349,736			9 0 0	0 0	100	251	Caledonian.....	1,800,000
Dundee and Arbroath.....	16	100,000	49,445	153,416	2,989	6,993	1 5 0	5 0 0	25	36	Cambridge and Lincoln....	1,250,000
Durham and Sunderland.....	18	169,350	124,055	270,392	9,889	17,702		nihil.	50	25	Chatham and Portsmouth...	5,000,000
East County and North and East.....	86	4,443,200	1,341,155	3,931,905	47,385	118,726	1 6 6		45	57	Chester and Wrexham.....	120,000
Edinburg and Glasgow.....	46	1,125,000	375,000	1,649,523	29,429	55,866	1 5 0	5 0 0	50	78	Churnet valley.....	1,800,000
Glasgow, Paisley and Ayr.....	51	937,500		1,071,258	12,446	36,736	1 5 0	5 0 0	50	72	Direct Northern to York...	4,000,000
Glasgow, Paisley and Greenock.....	22	650,000	216,666	797,643	11,830	23,447	0 5 0	2 0 0	25	21	Dublin and Belfast.....	950,000
Grand Junction.....	104	2,478,712		2,503,671	84,309	195,080	5 0 0	10 0 0	100	239	Dundee and Perth.....	250,000
Great North of England.....	45	969,000	581,017	1,307,487	12,201	36,189	3 0 0	6 0 0	100	230	Edinburg and Northern....	800,000
Great Western.....	221	4,650,000	3,679,343	7,445,689	143,279	440,046	4 0 0	8 0 0	80	215	Ely and Bedford.....	270,000
Hartlepool.....	15	438,000	155,540	719,205				8 0 0	100		Glasgow, Dum. & Carlisle..	1,300,000
Leicester and Swannington.....	16	140,000		140,000	2,207	6,317	1 5 0	5 0 0	50		Gt. South and West Ext....	1,200,000
Liverpool and Manchester.....	32	1,209,000	497,750	1,785,000	64,885	141,252	5 0 0	10 0 0	100	214	Gt. Grimsby and Sheffield..	600,000
Llanelli.....	27	200,000	44,000	221,624			1 0 0	2 0 0	87		Harwich and E. coun. Jun.	160,000
London and Birmingham.....	202	6,874,976	1,928,845	6,614,005	96,413	456,997	5 0 0	10 0 0	100	245	Huddersfield & M. rl. & cl.	600,000
London and Blackwall.....	3	804,000	266,000	1,768,851	15,978	23,870	3 0 1	10 0 0	16	10	Kendal and Windermere...	125,000
London and Brighton.....	56	1,935,000	705,000	2,637,753	30,490	130,156	1 10 0	6 0 0	50	77	Leeds and Dewsbury.....	400,000
London and Croyden.....	8	550,000	229,000	761,885	7,583	10,545	0 8 0	4 0 0	14	23	Leeds and Thirsk.....	800,000
London and Greenwich.....	3	759,383	233,300	1,040,930	15,193	28,933		nihil.	13	11	Liv. Ormskirk and Preston	600,000
London and South Western.....	92	2,222,100	630,100	2,604,405	89,439	190,631	2 0 0	10 0 0	41	82	London and Portsmouth...	1,750,000
Manchester and Birmingham.....	31	2,100,000	690,586	1,923,699	15,397	58,162	1 0 0	5 0 0	40	62	London and York.....	5,000,000
Manchester and Bolton.....	10	778,100	197,730	773,743	8,585	21,140	2 2 0	4 10 0	93	169	Londonderry & Enniskillen	500,000
Manchester and Leeds and Hull.....	87	2,937,500	1,943,932	3,921,593	46,653	156,761		8 10 0	60	170	Lynn and Ely.....	200,000
Midland railway.....	179	5,158,900	1,719,630	6,279,838	75,227	276,129	3 0 0	6 0 0	100	192	Manchester, Bury and Ross	300,000
Newcastle and Carlisle.....	61	878,240	188,563	1,135,069	26,499	46,745	5 0 0	5 0 0	100	113	Manchester and Buxton....	250,000
Newcastle and Darlington.....	23	500,000		405,728			1 0 0	8 0 0	21	56	Mullingar and Athlone....	
Newcastle and North Shields.....	7	150,000	153,876	309,629	8,943	18,466		6 9 0	50	69	Newcastle and Berwick....	700,000
North Union.....	39	739,201	308,306	1,028,593	24,788	37,794	2 10 0	6 5 0	100	176	Richmond & W. End June.	
Paris and Orleans.....	82	1,600,000	400,000	1,978,415			0 16 0	8 0 0	20	45	Scottish Central.....	700,000
Paris and Rouen.....	84	1,440,000			31,247	91,171		8 0 0	20	40	Sheffield and Lincolnshire	650,000
Preston and Wyre.....	19	830,000	179,852	355,161	4,191	7,066		4 0 0	50	32	Shrewsbury and Gd. June.	400,000
Sheffield and Manchester.....	19	1,150,000	311,759	951,455	11,895	14,876		nihil.	87	135	Shrew. Wolv. Dudley & B.	900,000
South Eastern.....	88	2,996,000	1,530,277	3,464,172	69,288	139,042		3 1 4	33	48	Trent Valley.....	900,000
Taff Vale.....	30	465,000	195,000	595,089	9,115	22,692	1 17 3	15 0 0	100	104	West London Extension...	64,000
Ulster.....	25	519,150	20,000	348,626	5,401	13,856	0 15 0	5 1 8	32	52	West Yorkshire.....	1,000,000
Yarmouth and Norwich.....	20	187,500	62,500	230,036	5,186	10,008	1 0 0	5 0 0	20	29	Whitehaven and Maryport	100,000
York and N. Mid. and Leeds and Selby	28	1,062,500	167,500	1,107,146	31,349	75,474	2 10 0	10 0 0	50	115	FRENCH RAILWAYS.	
											Boulogne and Amiens....	1,500,000
											Central of France.....	1,280,000
											Lyons and Avignon.....	2,400,000
											Orleans, Tours & Bordeaux	2,000,000
											Paris and Lyons.....	2,500,000
											Paris and Orleans.....	1,600,000
											Paris and Rouen.....	1,400,000

Steam and Miscellaneous.

NAME OF COMPANY.	Num. of shares.	Am't. of share.	Amount paid.	Div. p.c. per ann.	Last price.	Present price.	NAME OF COMPANY.	Num. of shares.	Am't. of share.	Amount paid.	Div. p.c. per ann.	Last price.	Present price.
Anglo Mexican Mint....	10,000	10	10	.....	15 1/2	15 1/2	Loughborough.....	70	142 1/2	142 1/2	70	1140	.....
Anti Dry Rot.....	10,000	.....	18 1/2	.....	2	.....	Mosmouthshire.....	2,409	100	100	10	160	160
Australian Trust Company	5,700	100	35	.....	34 1/2	.....	Melton Mowbray.....	250	100	100	10	117	117
General Steam Navigation	20,000	15	14	10	27 1/2	27	Mersey and Irwell.....	500	100	1 0	10	.....	.....
Gt. Western Steam Pa.....	.....	.....	100	.....	25	.....	Macclesfield.....	3,000	100	100	2 1/2	15	15
Metropolitan Wood Pav.....	15,000	10	6	5	6 1/2	.....	Neath.....	247	100	100	17	365	365
Patent Elastic Pav.....	10,000	1	1	5	1 1/2	.....	Oxford.....	1,786	100	100	30	505	.....
Peninsular and Oriental..	11,493	50	50	7	64 1/2	65	Regents or Loncon.....	21,418	33 1/2	33 1/2	2 1/2	25	25
Ditto.....	3,200	50	40	7	.....	.....	Shropshire.....	500	125	125	6	120	120
Polytechnic Institution...	.....	.....	6	.....	.....	.....	Somerset coal.....	800	150	150	7 1/2	123	123
Reversionary Int. Soc.....	5,387	100	100	4 1/2	104	104	Stafford and Worcester...	700	140	140	25	480	480
R. Mail Steam Packet.....	15,000	100	60	.....	36 1/2	37	Shrewsbury.....	500	125	125	12	230	230
South Western Steam.....	4,000	25	5	.....	.....	.....	Stourbridge.....	300	145	145	14	360	360
Ship Owners' Towing.....	3,000	10	7 1/2	10	15	.....	Stroudwater.....	200	150	150	19	.....	.....
Thames Tunnel.....	4,000	50	50	.....	.....	.....	Swansea.....	533	100	100	15	240	240
University College.....	1,500	100	100	.....	.....	.....	Sewern & Why & Rail Av.	3,762	26 1/2	26 1/2	5 1/2	30	30
Canals.							Trent and Mersey.....	2,600	50	50	65	495	.....
Ashby de la Zouch.....	1,432	113	av.	4	70	70	Thames and Medway.....	8,149	19 1/2	19 1/2	.....	10	10
Barnsley.....	720	100	100	14	180	180	Warwick and Birmingham.	1,000	100	100	10 1/2	167	.....
Birmingham, 1-16 share	3,000	118 1/2	79	10	150	160	Warwick and Napton.....	980	100	100	8 1/2	122	.....
Do. and Liverpool Junction	4,000	160	100	.....	13 1/2	13 1/2	Water Works.						
Coventry.....	500	100	100	20	365	365	Birmingham.....	4,800	25	25	3 1/2	28	28
Cromford.....	460	do.	do.	24	250	250	East London.....	4,433	100	100	8	223	225
Derby.....	600	do.	do.	9	105	105	Grand Junction.....	5,500	av.	41 2 3	7 1/2	88	90
Erewash.....	231	do.	do.	32	440	440	New River L. B. Ann....	1,500	.....	.....	2 1/2	.....	.....
Forth and Clyde.....	1,297	400 1/2	40 1/2	4	440	440	Manchester and Salford...	6,486	av.	30	8 1/2	57	57
Grand Junction.....	11,600	100	100	7	162	161 1/2	Vauxhall, lt. S. London...	1,000	100	5	55	55	55
Grand Surrey.....	1,500	do.	do.	.....	20	.....	West Middlesex.....	8,294	av.	63 1/2	6 1/2	126	127
Gloucester and Berkley...	5,000	do.	do.	.....	8	.....	Docks.						
Grantham.....	749	150	150	8	185	185	Commercial Dock.....	1,065	100	100	3	80	.....
Lancaster.....	11,699	47 1/2	47 1/2	3	40	40	East and West India....	.....	sto.	.....	5 1/2	137	.....
Leeds and Liverpool.....	2,897	100	100	34	640	640	London.....	3,238,310	sto.	.....	4 1/2	114	115
Leicester.....	545	14	140	9	9	139	Katharine.....	1,352,752	sto.	.....	5	116	171
							Southampton.....	7,000	50	50	.....	.....	.....

AMERICAN STATE WORKS AND CANALS, ETC.

STATE WORKS.		Length in miles.	Cost.	1893.		1894.		The State Canals are all 4 feet deep, and the locks are 13 to 17 feet wide, and 50 to 90 feet in length.	
				Income.	Expend.	Income.	Expend.		
N. Y.	1. Black river canal.....	35	1,524,987					The six millions paid to the canal fund from auction and salt duties are not included in the estimate of cost. The Genesee valley and the Black river canals require large sums for their completion, the interest of which additional sum is much greater than the estimated gross income of these canals when finished. The sums re- quired to complete these two canals are \$2,000,- 000 and \$600,000, making their total cost when finished \$5,553,000 and \$2,400,000; an expendi- ture incurred on estimated incomes (admitted to be liberal,) of \$39,000 and \$14,000 respectively. The total receipts from the works of Pennsyl- vania for 1893 were \$1,019,401; for 1894 \$1,- 164,326, and the cost about 30 millions. The receipts for 1894 were as follows: Canal tolls, 578,404 Railroad tolls, 252,855 Motive power, 319,590 Trucks, 13,477 of which \$585,922 is from 118 miles of railroad, and \$578,404 from 550 miles of canal. The canals of Ohio are supported by a prop- erty tax of 5 1/2 mills on the dollar. There are 853 miles of canal in the State, which yielded in 1893 \$471,623, and in 1894 \$515,393, the cost, 1st Jan. '93 being \$15,577,233. The increase of '94 over '93 is only \$43,770, though the year '94 has exhibited a greater increase throughout the country than ever before known. These 21 millions on sundry works yield no income whatever. The central railroad yields above 6 per cent., and is the only State work—the Erie canal ex- cepted—which is able to stand alone.	
"	2. Cayuga and Seneca.....	21	237,000	16,557	10,953	24,618	14,443		
"	3. Champlain canal.....	64	1,251,604	102,308		116,739			
"	4. Chemung.....	23	684,600	8,140	14,486	14,385	12,740		
"	5. Chenango.....	97	2,420,000	16,195	15,967	22,179	15,960		
"	6. Crooked lake.....	8	156,777	461	3,674	1,496	3,951		
"	7. Erie—enlargement of.....	363	12,648,852	1,880,316					
"	8. Genesee valley.....	120	3,739,000						
"	9. 52 miles opened, cost \$1,500,000.....			12,292	13,819	19,641	15,557		
"	10. Oneida lake.....	6	50,000	225	2,239	621	1,636		
Pa.	11. Oswego.....	38	565,437	29,147	22,742	56,165	28,599		
"	12. Beaver division canal.....	25				7,381	5,386		
"	13. Delaware canal.....	60				109,278	22,870		
"	14. French creek.....	45							
"	15. Seneca river towing path.....		69,276			381			
"	16. Columbia railroad.....	82				443,336	205,067		
"	17. Eastern division.....	36				179,781	138,915		
"	18. Juniata canal.....	93							
"	19. Portage railroad.....	130				351,102	248,943		
"	20. Western division canal.....	105							
"	21. North branch Susquehanna canal.....	73				101,949	57,633		
"	22. West " " ".....	73							
Ohio	23. Hocking canal.....	56	975,130	4,757		5,286	4,139		
"	24. Miami canal.....	85	1,660,742	68,640	38,826	77,844	22,341		
"	25. Miami extension.....	105	2,856,636	8,291		12,723	14,741		
"	26. Miami northern division.....	35	332,000			unfin'd.			
"	27. Muskingum.....	91	1,627,318	23,167		29,385	15,027		
"	28. Ohio.....	334	4,600,000	322,754	123,398	343,711	113,210		
"	29. Wabash.....	91	3,028,340	35,922	6,400	49,589	12,817		
"	30. Walhonding.....	25	607,269	838	39,005	1,977	1,238		
"	31. Western road.....	31	255,015	7,254	1,782	8,747	2,929		
Ind.	32. Sundry works.....		11,000,000						
"	33. Maume canal.....								
Ill.	34. Sundry works.....		10,000,000						
Mich.	35. Central railroad.....	110	1,842,308	149,987	75,960	211,170	89,420		
"	36. Southern railroad.....	68	936,295	24,064	7,907	60,341	70,000		

CANALS.		Length in miles.	Cost.	1893.		Div. per cent.	1894.		Div. per cent.	Value of stock.	REMARKS.
				Gross.	Nett.		Gross.	Nett.			
	Blackstone.....	25	400,000								We may, perhaps, at some future time be enabled to give the particu- lars of all these canals. The Chesapeake and Ohio canal is not yet completed to the coal mines, hence its trifling income. The enlargement of the Schuyl- kill canal has been commenced. The Morris canal was lately sold for one million, about one-fourth of its cost. It is said in the papers that it is to be enlarged. We have seen no report, nor heard of the ap- pointment of any engineer.
	Bald Eagle Navigation.....	25	400,000								
	Beaver and Sandy, (part).....		1,000,000								
	Charleston, (S. C.).....										
	Chesapeake and Ohio.....	184	12,370,470	47,637							
	Conestoga.....	12	300,000								
	Delaware and Chesapeake.....	13								26	
	Schuylkill.....	108	3,500,000	279,795	102,221		190,693	120,624		31	
	Farmington.....										
	James river and Kenhawa.....										
	Middlesex.....										
	Port Deposit.....	10	200,000								
	Delaware and Raritan.....	43	2,900,000	99,623	53,327		131,491	84,455			
	Southwark.....		300,000								
	Tide Water.....	45	2,900,000								
	Union.....	80	2,000,000								
	Morris.....	101	1,000,000							28	
	Dismal Swamp.....										

CANADIAN CANALS.		Length in miles.	No. of locks.	Lockage in feet.	Size of locks.			Width of canal.		Estimate.	Expended to Sept. 1893.	Income.	
					Length of chamber.	Width.	Depth on mud sill.	Bottom.	Surface.			1893.	1894.
	The Welland canal.....				feet.	feet.	feet.	feet.	feet.	3,948,572	2,485,572	64,656	
{	Main trunk from Port Colborne to Port Dalhousie.....	28	31	328	150	26 1-2	8 1-2	45	81	.....	.....
	Junction branch to Dunville.....	21	1	6	150	26 1-2	8 1-2	35	71	.....	.....
	Broad creek branch to Port Maitland { not added below.	1 1-2	1	6	200	45	9	45	85	.....	.....
	The St. Lawrence canal.....												
{	Galops and Port Cardinal.....	2	2	7	200	45	9	50	90	.....	.....
	Rapid Plat.....	4	2	11 1-2	200	45	9	50	90	672,498	973		
	Farren's point.....	3-4	1	3 1-2	200	45	9	50	90	.....	.....
	Cornwall, passing the Long Sault rapids.....	11 1-2	7	48	200	55	9	100	150	865,372	1,665,663		
	Beauharnois, do. Coteau, Cedars and Cascades road.....	11 1-4	9	82 1-2	200	45	9	80	120	1,190,087	275,496		
	Lachine, do. Lachine rapids.....	8 1-2	5	44 1-2	200	45	9	80	120	old canal.	400,000	29,288	
	Elargement of do.....									1,001,333	64,439		
	Total from lake Erie to the sea.....	12	57	525									
	Chambly.....	66	9	74	120	24	6	36	60	200,000	440,000	1,409	

COAL COMPANIES.		Length in miles.	Cost.	1893.		Div. per cent.	1894.		Div. per cent.	Value of stock.	REMARKS.
		R. rd. Canals.		Gross.	Nett.		Gross.	Nett.			
	Delaware and Hudson.....	16	108	2,800,000	930,203	196,702	10			130	
	Lehigh.....	20	72	6,000,000						31	

AMERICAN RAILROADS.														SALES.	
RAILROADS.	Length in miles.	Cost.	Loans and debts.	Number of shares.	Paid on here.	1883.		Div. per cent.	1884.		Div. per cent.	Prev. prices.	Week ending July 16.	Shares.	Price.
						Gross.	Nett.		Gross.	Nett.					
Me. 1 Portland, Saco and Portsmouth.	50	1,200,000				89,997	47,166	7	131,404	62,172	6	103 1/2	5	103 1/2	
N. H. 2 Concord.	35	760,000													
Mass. 3 Boston and Maine.	56	1,485,461				178,745	68,499	6	233,101	86,401	6 1/2	117	8	114 1/2	
" 4 Boston and Maine extension.	17 1/2	455,703	unfin.												
" 5 Boston and Lowell.	26	1,863,746				277,315	144,000	8	316,909	147,615	8	120	4	111	
" 6 Boston and Providence.	41	1,886,135	none.	18,600	100	233,388	110,823	6	282,701	156,109	6	114			
" 7 Boston and Worcester.	44	2,914,078				40,141	162,000	6	428,437	195,163	7 1/2	120 1/2		54 1/2	
" 8 Berkshire.	21	250,000	not stated				17,500		7	17,787					
" 9 Charlestown branch.		280,260						13	34,654	13,971	5 1/2	112 1/2	50	80	
" 10 Eastern.	54	2,388,631				279,563	140,595	6	337,238	227,920	8	113 1/2	275	108 1/2	
" 11 Fitchburg.	50	1,160,000	just op'n'd						42,759	26,835		124			
" 12 Nashua and Lowell.	14 1/2	380,000				84,079		8	94,588	34,944	10	123			
" 13 New Bedford and Taunton.	20	430,962				50,671	24,000	6	64,998	24,000	6				
" 14 Northampton and Springfield.		172,883	unfin.												
" 15 Norwich and Worcester.	59	2,170,366	900,000	16,535	100	162,336	24,871		230,674	99,464	3	71 1/2	3,355	71 1/2	
" 16 Old Colony.		67,822	unfin.									106			
" 17 Stoughton branch.	4	63,075	unfin.												
" 18 Taunton branch.	11	250,000					20,000	8	96,687	20,000	8	118			
" 19 Vermont and Massachusetts.															
" 20 West Stockbridge.	3	41,516	200		100						4				
" 21 Western, (117 miles in Mass.)	156	7,686,202	4,686,202	30,000		573,882	284,432		753,753	439,679	3	101	20	102 1/2	
" 22 Worcester branch to Milbury.		8,431	506												
" 23 Housatonic, (10 months.)	74	1,344,123							150,000			31			
Con. 24 Hartford and New Haven.	38	1,100,000	100,000	10,000	100						6	95	25	93	
" 25 Hartford and Springfield.	25 1/2	600,000	400,000	2,000	100										
" 26 Stonington, (year ending 1st Sept.)	48	2,600,000	650,000	13,000	100	113,889			154,724	79,845		29	625	28 1/2	
N. Y. 27 Attica and Buffalo.	31	356,211				45,896	7,522		73,248	48,033	0				
" 28 Auburn and Rochester.	78	1,796,342	200,000	14,000	100	189,693	112,000		237,667	152,007	6	109 1/2	1	109	
" 29 Auburn and Syracuse.	96	766,657			133 1/2	86,291	27,334		96,738	52,544	6	116			
" 30 Buffalo and Niagara.	22	200,000		1,500								100			
" 31 Erie, (446 miles.)		5,000,000										29	1,325	30	
" 32 Erie, opened.	53						48,000		126,020	59,075					
" 33 Harlem.	26	1,206,231							140,685	62,399		69 1/2	170	69 1/2	
" 34 Hudson and Berkshire.	31	575,612		50					35,029	1,789	0	11 1/2			
" 35 Long Island.	96	1,610,221	392,340	29,846					153,456	58,996	0	71	7,380	68 1/2	
" 36 Mohawk and Hudson.	17	1,317,893	400,000	10,000	100	69,948	58,780		79,804	45,763	0	58 1/2			
" 37 Saratoga and Schenectady.	22	303,658				42,242	3,000	1	34,666	8,455	0				
" 38 Schenectady and Troy.	20 1/2	640,800				28,043			32,646	6,365	0				
" 39 Syracuse and Utica.	53	1,115,897	none.	16,000	62 1/2	163,701	72,000		192,061	120,992	8	117			
" 40 Tonawanda.	43	727,332				76,227			114,177	75,865	5				
" 41 Troy and Greenbush.	6	180,000													
" 42 Troy and Saratoga.	25	475,801				44,325	21,000		38,502	9,971	2 1/2				
" 43 Utica and Schenectady.	78	2,168,165	none.	20,000	100	277,164	180,000	9	331,932	199,094	8	132	20	132	
N. J. 44 Camden and Amboy.	61	3,200,000				682,832	383,880		784,191	404,956		112			
" 45 Elizabethtown and Somerville.	26	500,000													
" 46 New Jersey.	34	2,000,000										95	100	95 1/2	
" 47 Paterson.	16	500,000									6	90	1,225	88 1/2	
Pa. 48 Beaver Meadow.	26	1,000,000													
" 49 Cumberland Valley.	46	1,250,000													
" 50 Harrisburg and Lancaster.	36	860,000										30			
" 51 Hazleton branch.	10	120,000													
" 52 Little Schuylkill.	29	900,000													
" 53 Blossburg and Corning.	40	600,000													
" 54 Mauch Chunk.	9	100,000													
" 55 Minehill and Schuylkill Haven.	18	315,000						12				80			
" 56 Norristown.	20	800,000										6 1/2			
" 57 Philadelphia and Trenton.	30	400,000										104			
" 58 Pottsville and Danville.	29 1/2	1,500,000													
" 59 Reading.	94	9,457,570	7,447,570	40,200	50				597,613	343,511		58	2,330	57	
" 60 Schuylkill valley.	10	1,000,000													
" 61 Williamsport and Elmira.	25	400,000				20,000									
" 62 Philadelphia and Baltimore.	93 1/2	4,400,000				43,043	200,000			210,000		15 1/2	11,831	15 1/2	
Del. 63 Frenchtown.	16	600,000													
Md. 64 Baltimore and Ohio, (1st Oct.)	188 1/2	7,623,600				575,235	279,402		658,620	346,946		49 1/2	37	49 1/2	
" 65 Baltimore and Susquehanna.	58	3,000,000										21			
" 66 Baltimore and Washington.	38	1,800,000				177,227	71,691		212,129	104,529		84			
Va. 67 Greenville and Roanoke.	180 1/2	284,433	37,644	2,000	100				25,368	6,074		28			
" 68 Petersburg.	63 1/2	969,880	63,000	7,690	100				122,871	72,898	3	77			
" 69 Portsmouth and Roanoke.	78 1/2	1,454,171													
" 70 Richmond, Fredericksburg and Potomac.	76 1/2	800,000							185,243	85,688	6				
" 71 Richmond and Petersburg.	22 1/2	700,000													
" 72 Winchester and Potomac.	32 1/2	500,000													
N. C. 73 Raleigh and Gaston.	84 1/2	1,360,000													
" 74 Wilmington and Raleigh.	161	1,800,000													
S. C. 75 South Carolina.	136								532,871	140,196	5				
" 76 Columbia.	66	5,671,452		34,410	75	201,464	77,456		328,425	180,704					
Ga. 77 Central.	190	2,581,723				227,532	93,190								
" 78 Georgia.	147 1/2	2,650,000				248,026	158,207		248,096	147,523					
" 79 Montgomery and West Point.	89	500,000	170,000	100					35,000	15,000					
Ky. 80 Lexington and Ohio.	40	450,000													
Ohio 81 Little Miami.	40	400,000													
" 82 Mad river.	40	152,000													
Ind. 83 Madison and Indianapolis.	56	212,000													
Can. 84 Champlain and St. Lawrence.	15						12,000		58,000	24,000		110			

Correspondents will oblige us by sending in their communications by Monday morning at latest.

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AMERICAN RAILROAD JOURNAL.

PUBLISHED BY D. K. MINOR, 23 Chambers street, N. Y.

Thursday, August 14, 1845.

THE COAL TRADE—SCHUYLKILL VALLEY.

The shipments by railroad are 24,032 tons, and by canal 7,160 16, making 31,192 17 tons for the week.

BY RAILROAD.

From Pottsville and Port Carbon—total.....	196,606
From Schuylkill Haven—total.....	214,030
From Port Clinton—total.....	8,749

Total by railroad.....421,280

BY CANAL.

From Pottsville and Port Carbon—total.....	72,514
From Schuylkill Haven—total.....	19,853
From Port Clinton.....	25,730

Total by canal.....118,098

Total by railroad and canal.....539,481

LEHIGH COAL TRADE.

Total shipments from Mauch Chunk. Lehigh coal and navigation co.

Summit mines, -	61,517
Room run do., -	33,288—127,805
Beaver Meadow railroad and coal co.,	40,752
From Penn Haven—Hazleton coal co.,	33,420
From Rock Port—Buck Mountain coal co.,	10,084

212,061

WYOMING COAL TRADE—total.....81,526

PINE GROVE COAL TRADE—total.....35,792

MINESVILLE AND SCHUYLKILL HAVEN RAILROAD—total tons.....234,758

MOUNT CARBON RAILROAD—total tons.....145,001

MILL CREEK RAILROAD—total.....32,018

[Miners' Journal.]

The Great Britain.

This much talked of, and long looked for, steamship has arrived, and has produced a sensation little, if any, less than did the GREAT WESTERN on her first arrival under the same gentlemanly commander in the summer of 1839. The passage was made in one or two hours short of fifteen days, notwithstanding several days of rough weather, and it was remarked to us, by one of the passengers, that "she behaved remarkably well, especially when the weather was roughest."

Many thousand people thronged the wharfs to see this wonderful evidence of the rapid progress of the arts; and all, who were so fortunate as to witness her beautiful model, and graceful movement as she passed up the bay and the East river to her berth, foot of Clinton street, appeared astonished and delighted; and while some gave utterance to their astonishment in remarks that "she will never be beat!" to us she appeared merely as "a link between the past and the future" only as another evidence, that we are still in the infancy of the useful application of steam power. The first half century has not yet passed since the first successful application of steam power to useful purpose, and who can estimate the extent and value of its present use? If, then, so much has been accomplished, within that period, where nothing was before known, and very little

imagined, or anticipated, what may not be accomplished with the present experience with its use in a thousand different modes!

We have received our regular files of English railway periodicals by the Great Britain, but find little new of interest. The numerous applications before Parliament for railroads are still pushed with vigor, and "the battle of the gauges," seems to be as far as ever from a termination. The prices of iron have receded a little. It was decided at a meeting of the iron masters of Dudley district on the 15th of July, that the reduction of £2 per ton, recommended at a previous meeting, should be confirmed; and the prices adopted at the works, were £8 for bar, and £3 10 to £4 for pig. There is however great activity in all the iron districts—and such is the demand, that, in the vicinity of Merthyr Tydfil, there is no cessation of labor, not even on Sundays.

The most interesting, and important information which we derive from our journals is the astonishing advance in the value of railway shares since first December last. We have compared the prices of 19th July, with those in our Journal of 2nd January last—taking thirty of the roads, in that table the average amount paid on the shares of which is only £59 6s.—and the average value of which was, in December last, £77 15s., we find the average value, as given in the last quotations, to be £109 5s.; or an average advance in value, from December 1st, 1844, to July 19th 1845, of £31 10s., and on the average cost of £49 19s., or over 80 per cent. The advance has not been as great in all, yet almost every railroad in use in England, or indeed in Europe shows a regular increase of business, and advance in the value of the shares—facts cheering to us in this country; and of a character which ought to stimulate us to renewed efforts for the early completion of the important lines from our large cities to the interior and especially in New York, Philadelphia, Baltimore, Charleston and Savannah. These cities must see to the completion of the lines terminating in each, and reaching the fertile regions from which they derive their prosperity, if they desire to keep pace with the cities of New England and especially with Boston.

We shall give in our next the list of roads referred to, that our readers may have all the facts before them, upon which we base this almost incredible statement.

Hartford, Danbury & New York Railroad.

Active operations have commenced on this line, as we learn from a letter, an extract from which we give annexed. This is the way to succeed; first resolve to succeed and then use the necessary effort. The writer says: "I am happy to say that the ex-committee have engaged the services of Edward H. Beoadhead, esq., an engineer of distinguished ability and reputation, well known in your state, for the survey of the proposed New York and Hartford railroad, and that he has already commenced an exploration of the route. The interest in favor of this route and the sense of its great importance, are daily increasing, and if New Yorkers have their eyes open to solid and profitable investments, this road will be completed from New York to Hartford within a few years."

The charter for this road was not obtained without considerable effort. A rival route and the sound steamboat interest, were arrayed against it, and if we recollect, it was reported against by a majority of the joint select committee of the legislature; yet it was passed by large majorities, 14 to 7 in the senate, 111 to 61 in the lower house.

The minority report of the committee, gives the following good reasons why the charter should be granted. We coincide entirely with the reasons of this report, especially with that part which says that "the legislature shall not withhold the privilege of creating at their own expense the facilities for their industry, which have not been withheld from other sections of the state," as well as in that part which says that "as the amount of travel and transportation are in all cases greatly increased by railroads, there will be sufficient business for all." We will add, 'all' which the people may build with their own means. There is now little fear that the people will pay out their own money to build useless railroads; there is much more danger that they will not build all that are necessary, and that would be profitable. The minority say:

"That the towns upon the proposed route in the interior being destitute of steamboat facilities, and without navigable rivers, have great need of the proposed railroad, and strongly claims that the legislature shall not withhold from them the privilege of creating, at their own expense, the facilities for their industry, which have in no instance been refused to other sections of the state."

"That independent of the long travel, the resources of the towns upon and in the vicinity of the route, and their ability to sustain a railroad with their local business and travel, are fully equal to those of any other section of the state, for the same distance."

"That the route is a feasible one; it does not, like the Western road, cross the hills at right angles, but diagonally; and cannot be more difficult than the road surveyed from Fitchburg to Braintreeboro', which competent engineers have estimated to cost not exceeding \$23,000 per mile."

"That in time of war this interior route will not be exposed to invasion or attacks by sea, and will therefore for the transport of troops and supplies, as well as of the public mails, be of great national as well as local utility."

"That inasmuch as the amount of travel and transportation are in all cases greatly increased by railroads, there will be sufficient business for all; and while this state supports three railroads running from north to south, it can at least sustain one running from east to west, and thus accommodate those towns which have not the good fortune to be located in the direction of the river valleys or upon the sea coast."

"That since the legislature do not undertake to reduce the tolls and charges of any chartered companies, whether exorbitant or not, the only way to protect the public adequately, is to create the fair competition of new routes, and thus prevent any one company from assuming the character of a monopoly, oppressive to the community."

"That this road is called for by the real wants of the public, and not by speculators; it is supported by the undivided approval of the inhabitants on the line of the road and receives no opposition except from corporations already chartered, who would thus seek to render their own privileges exclusive, and free their power over the public from the salutary check of competition."

(Foreign Correspondence of the American Railroad Journal.)

21 TOKEN HOUSE YARD,
London, July 16th, 1845.

Dear Sir:—I had the pleasure to address you on the 4th inst., by the steamer Great Western, and then told you there was no celebration of the anniversary of our country's national birth in London, but I found, subsequently, that this day did not pass over uncelebrated and forgotten, for I learn by the newspapers that Mr. Forrest, Mr. Wickoff and others of our countrymen met and did honor to the memorable day which should always be kept in remembrance as long as our nation exists. I now enclose you Bradshaw's monthly railway guide, which will give you much information respecting the British and Continental railways, also Herapath's Railway Journal, received since I sent the last five or six numbers by the Great Western, together with five numbers of the Railway Chronicle, an excellent weekly publication on railways, which with Herapath's I will continue to send you regularly by each steamer. I think with these two London papers you will get all the information you can desire respecting European railway improvements, which are going on with great spirit, not only in Great Britain and Ireland, but also in most countries on the continent. In Herapath's Journal of July 5th, you will find an excellent article on George Hudson and George Stephenson, well worthy of republication in your Journal. So also, in the Railway Chronicle of July 5th, you will find an article on George Hudson, who is generally called the "Napoleon of railways," but in my opinion, this really useful man is worth as many Napoleons and Alexanders (falsely called great) as could be placed between this and York, where Mr. Hudson resides.—Great warriors are great murderers and destructives, but George Hudson is only great in the good deeds he is constantly effecting by means of his extraordinary judgment—great and indefatigable exertions aided by his great capital. He has so much of the public confidence that every one rallies around him and enables him to effect the most astonishing public works, many of which, until he appeared upon the stage, were in a state of abeyance or neglect, and produced no income to their proprietors. The moment Mr. Hudson undertakes a thing, it succeeds.—There are numerous examples of his buying up railway companies that yielded either no dividend at all or only a nominal one of 1 or 2 per cent. per annum, which after being under his charge for 18 months or two years have become valuable, and now produce 8, 10, 12 and even 15 per cent. per annum di-

vidends among the proprietors. Mr. Hudson was a few years ago, a haberdasher (a shop keeper) in York, where he made a comfortable fortune, but since he commenced diverting his attention to railways, he became chairman of the "York and North Midland railway company," and numerous other companies, whereby he has made an immense fortune, and is now a millionaire of the 1st rank. If Pennsylvania had a George Hudson to buy up the Philadelphia and Columbia railway, the Lancaster and Harrisburg and the Harrisburg and Chambersburg railways, and then carry on the railway to Pittsburgh he would confer inestimable benefits upon my own state, Pennsylvania, where for want of a man of commanding influence and talents, railway transportation and railway concerns languish most deplorably. It is a miserable plan to have three railway corporations between Philadelphia and Chambersburg. If the three concerns were under the administration of one company, or under one head, the expenses would be incalculably diminished, the efficiency would be immeasurably increased, and the shareholders as well as the whole community would be excessively benefited. The amalgamation of small railways with larger ones, has been practised in this country by Mr. Hudson, with singular advantage to himself, the different companies and the whole community, and I trust this excellent example will be imitated in New York, by getting the whole line of roads between Albany and Buffalo under one management, and also in my own state, by amalgamating the railways from Philadelphia to Chambersburg, and having one efficient and judiciously conducted administration, instead of the present three most inefficient and expensively conducted concerns, nearly worthless to the proprietors and of little use to the community.

In Herapath's Journal, July 5th, you will find an article headed "American railway management," and refers to "our intelligent contemporary, the editor of the American Railroad Journal," and gives sound advice respecting the reduction of fares upon our American roads, which between New York and Washington are too high, and might be lowered with great profit to the proprietors and the travelling community.

JULY, 17th.

I send you a newspaper slip, which my friend, Mr. Cresson, of Philadelphia, had circulated after publishing a letter I wrote to him under date, January 2, 1845. As this letter contains some information, it may be worth while to republish it in your Journal. There is no doubt that diminution of fares

increases amazingly the number of travellers in a line of country where population exists as is the case between New York and Washington. It appears to me that our railway companies do not lay themselves out for carrying cattle, horses, sheep, pigs, poultry, etc., as much as they ought to. In this country, the transportation of these animals is a source of a very large and increasing profit. It is found the loss to cattle by bringing them to market on the hoof is very much greater than the expense of conveying them in quick and comfortable railway trains. I am happy to say that railway iron has declined since I wrote to you. I could now get good edge rail of the common patterns used in America, at £9 per ton, less 5 per cent. discount for cash. I do not suppose there will be any further abatement of price, for there will be at least 2,500 miles of double track railway sanctioned by parliament at the present session, which with rails at 75 lbs. per yard, and all the accessories will require at least 500 tons per mile, which will require a good lot of iron, but as this supply will not be wanted immediately, but will be required from time to time during the next two or three years, I do not think it probable the price will advance again to the high rate it did in March and April, the result of the efforts of speculators. I see by your journal that most important railway projects are contemplated in our country. The completion of the road from the Hudson to lake Erie, the New York and Albany road, and the several routes from Boston towards Montreal. These are all of vast importance, and I hope most sincerely they will be carried on, but I fear the high price of iron with \$25 per ton duty, will offer a most serious impediment to their construction. I hope congress, legislating for the whole country, will take this matter into consideration, and, if not abolish the duty altogether for 10 years, at least reduce it to a more reasonable scale. I really hope when our Pennsylvania iron masters come to view this important matter in its true light, that they will no longer oppose a measure which is calculated to promote the prosperity of our country in a most important manner, without interfering with their own profits. Some time ago, you published my letter on this subject, to the secretary of the treasury, and as all the arguments are equally strong in favor of this measure now, that they were then, I will be obliged if you will republish this letter again, and I accordingly send you a copy of it. I hope all the railway companies in the United States will unite in application to congress, to effect an abolition of the duty on railway iron, at least

on edge rails, for ten years, by the expiration of which time, I hope our countrymen will be prepared to manufacture all kinds of iron at home. I have marked in the Railway Chronicle, a notice of the steam pile driver, well worthy of your attention. In the same number, (for July 12th,) I have marked several other articles, which may be worth your looking at. In the Railway Guide, are two maps, of Ireland and Great Britain, which show all the railway projects now contemplated. I shall always be happy to serve you, and remain, dear sir,

Most sincerely yours,

GERARD RALSTON.

Wear of Iron on Railroads.

For the American Railroad Journal.

Mr. Editor:—Is not your correspondent J, giving himself unnecessary anxiety on the subject of the wear of iron on railways.—May it not be, that owing to an interested partiality for water carriage, the *thought* is in his case father to the *wish*.

Without, however, discussing the truth of the premises by which he comes to the deduction that the said wear is equal to one cent per ton per mile, which is in fact destructive to the future prosecution of the railway system, we may, in ample refutation of any such assumption, refer to the immense spread of that system in all parts of the world, feeling assured that were there any such destructive flaw in it, we should have had it sounded in the various *English, American, German, French and Russian* journals devoted to the discussion of railway progress. On the contrary, what has appeared in these journals goes to establish the fact that, *a railway bar of good quality and form will not wear at a rate beyond the means of provision, by a moderate annual appropriation from the earnings of the road, as for its other component items, and therefore can be maintained forever doing any amount of business.*

In the case of the Lowell railroad 26 miles long with a rail 56 lbs. per yard, at say \$66 per ton—to what does such an assumption of wear tend;—Take its business for 1845 at 180,000 tons, and that for 1846 at 200,000 tons: it should thus be at the end of two years, near its dissolution, and the tonnage have then reached the point at which the rail will require renewal *every year* thereafter. Thus if the business of this road only continues to increase in the same rapid ratio, its existence will soon be brought into a very narrow span. Its directors have now, however, been awakened to their danger, by your correspondent, and we may soon hear from them directly whether they sanction such a doctrine.

If, indeed, this position of your correspondent were true, how fatal would it prove to that great work the Reading railroad, so particularly the friend of the poor; and we strongly suspect it to have been mainly intended as a shaft aimed at this valuable road, now materially interfering with a certain canal; but not regarding the immense amount of tonnage which a portion of the rails on this road has already borne without injury in past years, we are willing to await the result of that which will pass on its new track in the present year of 1845, which cannot be less, of coal alone, than 800,000 tons, in the full confidence that one position above will be maintained, and that its then condition will afford ample guarantee of its long after continuing to be "fit for safe usage." And who can question the fact of the line of this road soon presenting an almost continuous succession of furnaces, forges and rolling mills, and affording it unrivalled advantages for the cheapest renewal of its rails, small as the demand in this respect promises to be. F.

Hydraulic Cement.

The following extract from a letter in relation to "Lawrence's Rosendale Hydraulic Cement," may be useful to some of our readers, we therefore give it a place in the Journal, with the remark, that every barrel is warranted.

For the American Railroad Journal.

FORT ADAMS, R.I.

July 11th, 1845.

D. J. Ogden, Jr., Sir:—Several years ago a great variety of mortars were mixed at this place, for the purpose of ascertaining the relative strengths of different proportions of cement, lime and sand. In all these mortars the Lawrence cement was the cement used. The mortars were made into prisms 6 in. long and 2 in. square. They were broken just one year after they were made, and the weights producing the fractures carefully ascertained. The prisms 6 in. long were supported for an inch at each end, leaving 4 in. between the points of support: a stirrup of iron with a knife edge, just so dull as to prevent any cutting action, was hung over the middle of the prism, to this was attached a pan into which sand was poured until the prism broke, and the weight producing rupture noted:

A mortar of Lawrence cement alone broke with the following weights: three cases,—657, 774, 801 lbs.: av. 744 lbs.

A mortar of cement, measured dry, with one half its bulk of sand, broke with the following weights: fourteen cases—918, 738, 936, 666, 495, 738, 486, 612, 684, 1,008, 783, 954, 522, 558: av. 731 lbs.

A mortar of cement mixed with an equal bulk of sand, broke with the following

weights: ten cases—315, 225, 130, 220, 360, 396, 306, 360, 315, 450: av. 308 lbs.

A mortar of cement mixed with double its bulk of sand, broke with the following weights: eight cases—117, 270, 117, 162, 126, 211, 135, 209.

Here is something from which to judge of the strength of mortar made of Lawrence cement.

I have used it under water, in cases in which it had to be lowered into the water in buckets, the buckets upset when the concrete had been lowered to the point of deposit, and upset too, directly in the water. This is the severest trial of cement. I filled a large hole in a wall, under water last year, with concrete made of this cement, and the filling perfectly answered its purpose.

It has been the only cement used at this work for many years, and it has proved to be an excellent material, in all its applications.

American Railway Management.

It affords us much pleasure to learn that we are fully sustained in our views on the subject of "low fares, frequent trains and high speed for passengers," on railroads, by that able, independent, and we believe, the oldest English railway periodical, "Heraclitus's Journal and Railway Magazine." It is well known, perhaps too well for some of our readers, that we let no opportunity pass, of inculcating this doctrine. Yet we did not hesitate to oppose the attempt made last winter, in our legislature to appoint a commissioner and to compel the railway companies, from the Hudson west to Buffalo, to reduce their fares. We should cheerfully advocate the passage of a law relieving those companies from the present restrictions upon their carrying freight—because it may save money to the people and reduce the canal tolls—and would not object to couple with it a clause prohibiting them from charging to exceed 3 cents—we believe 2½, or even 2 cents, would be better for the companies—per mile for passengers and a like amount per ton for freight. They will yet adopt rates as low as these from choice, because they will find it for their interest to do so. It was not just however to restrict them further on passengers unless they were relieved from the prohibition to carry freight, therefore we published and sustained their remonstrance to the legislature—and it is that remonstrance published in this journal, which called forth the following exceedingly just and appropriate remarks, by the independent and able editor of Heraclitus's Journal, on "American Railway Management." The views of the writer are clearly and forcibly expressed, and well sustained by numerous undeniable facts, and we desire to thank him for coming to our aid in this contest with a few powerful companies, and for expressing and sustaining our views in a manner so much better than we could do it ourselves. We will also assure him that the people here—the millions who travel—and at no distant day the shareholders also, will fully appreciate his motives in, and feel grateful to him for, thus calling attention to the subject, and furnishing them with important facts, which must ere long produce the desired result. For ourselves we cannot more forcibly express our approval of the motives

which dictated the remarks, than by republishing them in the Journal, and also by requesting their general re-publication in those papers with which we exchange. Great good will surely follow their re-publication in this country.

If we may be permitted to judge by a few instances, the Americans, notwithstanding their long and cheaply-constructed railways, impose a fare about equal to that charged in England—nay, in some cases higher. This appears to us quite opposed to the "Go-ahead" principle of that people, unless it be in the wrong way. Considering the relative positions of the two, the Americans should charge a fare *much cheaper* than we do. The average cost of their railways is perhaps, at the greatest, not more than a sixth of the cost of the English; for, if we allow their average cost per mile to be £5,000 which we believe is a full estimate, six times that amount would make our average £30,000 per mile—a sum which we heartily wish we could say was a fair average of what our railways have cost. Further, the Americans are not surely in a position to afford to pay as dearly as we can: money is a much more prevalent and cheaper commodity here than it is there. Looking, therefore, to these two circumstances alone, the much less costly nature of their lines of railway, and their inability to pay prices comparatively high, it is quite clear, to be on a par with our accommodation, their fare should be considerably lower than ours, instead of being, as it is, about equal to it.

We have been led to make these remarks by seeing in the "American Railroad Journal" a report in the shape of a "remonstrance," of the several companies on the line of railway from Attica to Albany, against sundry petitions of the inhabitants. The object of these petitions is to induce government interference to reduce the fares, to appoint a government commissioner, and to compel the companies to run night trains.

We are aware that the people of America enjoy in general the character of being stirring fellows, and are as prone to agitate against their own party as against other nations; but still, making allowance for this propensity, we fear there is some cause for their complaints of the manner in which the railway companies treat them. We imagine that the very terms of the remonstrance affecting the fares are sufficient to pour down upon the devoted heads of the directors petitions without number from enlightened citizens of New York. Therein they (the directors) "claim that four cents per mile is a reasonable fare." Four cents is rather more than 2d. a mile; we understand the petitioners to require its permanent reduction to 1½d. per mile, or to three cents. Now 2d. a mile over their long and cheaply constructed lines, levied upon a public to whom 4s. 2d. is, perhaps, equivalent in value to 6s. with us, certainly does appear a heavy charge. Why, what will our American directors say when we tell them that one of our highest-fared railways, and one, too, of our most costly lines, upon which upwards of £50,000 per mile has been expended, the Great Western railway, charge an average fare less than

theirs—namely, about 1½d. per mile. What will they say to that? We could quote innumerable other instances in which our fare is *much less* than theirs at 2d. a mile. Such is the Blackwall, where the average is a shade above 1½d. per mile. The Manchester and Leeds charge about 1.65, or a fraction higher than 1½d., three cents. The former of these lines cost about £300,000 per mile, and the latter £60,000 per mile. Moreover, we have fares to suit every class; any one that pleases so to do is allowed to avail himself of either uninterruptedly. Every line in the kingdom is compelled to carry passengers by the third-class at 1d. a mile, and it is a matter of notoriety that some of the first merchants in this country have been, and are frequently, seen in these carriages. And what is the result? Why it has been found, without exception, that the company is not in the least prejudiced by it, and that cheap fares produce the largest and most profitable income; that invariably where a reduction in the fare has been made a more than proportionate increase in the number of passengers has taken place. This, one would suppose, was the case only where the class of passengers was of a poor description, or where the fares were too high to admit of a large traffic. But no, it is not so. We have a notable instance to the contrary in the London and Birmingham railway. On this railway the largest and most wealthy description of traffic of any in the kingdom had for years existed at a certain fare; the line, as we all know, prospered well upon it; so well that the company, as an act of generosity towards the public, and expressly with the object of handing over to the public a portion of their large profits, reduced in a certain ratio the whole of their fares. What followed? Contrary to their expectation this reduction was immediately attended by an increase of traffic to an extent that the company derived a larger profit from it than it had by the old fare. The most zealous advocate for low fares did not anticipate this good result from the reduction they made. The reduction was not calculated to produce, as one would suppose, a greater number of passengers—a reduction, we will say, at about the rate of £1 7s. 6d. to £1 5s. We have the experience of nearly every line in the country which has tried the experiment, lines carrying passengers of all grades, to show that the lowest reasonable charges are compatible with the largest profits. It was but the other day that the chairman of the Manchester and Leeds railway, than which there is not a railway on which a large traffic is more ably managed, declared before a committee of the house of lords, that at the outset of their career, finding the traffic did not produce a sufficient dividend, the directors resorted to the bold, and some would say insane, measure, of considerably reducing the whole of the fares; and had succeeded in creating by that means an immense traffic, and in raising an uncertain next-to-nothing dividend to the large one of 10 per cent—more permanent, because they depended less on the caprices of a few. What do all these facts show?

Why, as clear as daylight, that the interests of the public and of shareholders are identical, that the better the one is served, the higher will be the dividend of the other.

Perhaps it will be argued, that the character and habits of the American and English people are widely different, and therefore a comparison does not hold. If there be any distinction, we think it would be in favor of cheap travelling in America; for undoubtedly of the two, the Americans, both from circumstances and inclination, are more prone to low prices, and being proverbially of mercurial, moving habits, would be induced, to a much greater extent than we are, to take advantage of the facility afforded to go "slickly" and inexpensively from place to place.

We trust that these remarks will be received by our friends across the water in the same spirit in which they are intended to be made. Our intelligent cotemporary, the Editor of the "American Railroad Journal" will, we are confident, do us that justice. And if he would but expound to his railroad countrymen the results of our experience, rather of an extensive nature, he may serve them a good turn, by leading them to adopt generally the mutually advantageous low-fare system. The force of example is great.

New York and Boston.

We find the following exceedingly well written article on the relative progress of these two cities in the "Morning News" of 7th inst. The writer of it has clear and correct views on the subject, with the ability to express them in an unusually forcible manner as well as to sustain them by figures and facts which ought to be brought under the observation of every property holder, and business man in this community.

The great difficulty, in arousing the people of this city to prompt and efficient action in relation to the two important lines of railroad north and west from it, lies in the very general opinion entertained by those who are "to the manor born," that New York has natural advantages so far superior to those of other cities, as to render all their efforts to compete with us of no avail; therefore it is quite unnecessary for them to build railroads, or other artificial means of communication, to retain their position. How sadly will they find themselves mistaken, when Boston, Portsmouth and Portland shall each have opened an easy and rapid means of communication with the canals, and the great and fertile west! When the means of avoiding New York shall be much more complete, and cheaper than those for reaching her, they will then find their relative position, as it stood ten years ago wonderfully changed. It will be somewhat similar, we imagine, to that of the Schuylkill canal and Reading railroad: a few years since the canal carried all the coal to market from that region,

and were able to divide 15, 18, and even 20 per cent and over, among the shareholders. These enormous dividends induced parties, not interest in the canal, to undertake to construct a railroad to compete for the coal carrying trade. At which those interested in the canal, turned up—not the whites of their eyes but—their dignified noses in utter contempt; as many of the people of New York have at the idea of anything like successful rivalry from Boston; and instead of paying off their loans, or enlarging their canal, and strengthening their connection with the mines by laying down the necessary tracks, and furnishing cars to the colliers, and reducing their charges for toll, they go on ridiculing the railroad—continue their high charges and making large dividends until, in the face of almost insurmountable difficulties, a single track of the railroad is completed to the coal region, and put into use, in competition, under great disadvantages, with the canal. Short of motive power, short of cars, and short of money, and without any connection with the mines, they commence the transportation of coal in 1842, and got down that year by great efforts 49,000 tons, while the canal brought down that year, if we recollect correctly, nearly 500,000 tons. Since that period the railroad has laid a second track, increased its motive power and cars, formed important and permanent connection with the mines, until they were able to bring down in the month of July past, notwithstanding two holidays, 104,565 tons of coal: and the canal during the same period brought down 25 or 26,000 tons, thus completely reversing the position of the two companies in three years. The success of the railroad has put the canal company earnestly at work, now they have lost the business, to regain it. They long since ceased making dividends, have reduced their tolls—and are enlarging the canal; and are resolved to regain what they have lost—which they will find more difficult a task than to lose it. So it will be with the citizens of New York, when Boston, Portsmouth and Portland have each their railroads penetrating the interior, with their business connections formed throughout the Canadas, and the western states—they will then be obliged to construct railroads and will find it no easier task to regain the business she has lost—but might have retained—than will the Schuylkill canal company to regain the coal trade. We ask the serious attention of our city readers especially to the following, and shall consider ourselves fortunate and well compensated for any amount of effort, within our power if we can be instrumental in arousing our citizens to the importance of immediate action which shall

effect the construction of the New York and Erie, and the New York and Albany railroads. The "News" says:

"We have before us the report of the auditor of the city of Boston for the fiscal year ending May 1st, 1845. Boston has in the last ten years, during which her great web work of railroads has been connected with the whole of New England, as well as with the trade of western New York by canal and railroads, run a race of rivalry with this city. Our property holders and business men have looked on with the most perfect display of Dutch phlegm, and Boston has gone ahead in a surprising manner. As an indication of this progress we will compare the personal and real estate valuations on which taxes were levied, for three years, as follows:

1841. Boston.		New York.	
Real estate	62,063,000	186,350,948	
Personal	36,043,600	98,106,606	251,194,920
1842.			
Real	65,509,500	176,489,042	
Personal	41,223,800	106,733,300	237,783,601
1844.			
Real	72,048,000	171,936,591	
Personal	46,402,300	118,450,300	235,960,047

Here is a very remarkable result. Boston has increased \$20,000,000, or 20 per cent, while New York has declined \$15,234,873, or 7 per cent. Whence this great change in the prosperity of the two cities? If we compare the year 1841 with the year 1844, the result is as follows:

	Boston.		New York.	
	Real Estate.	Personal.	Real Estate.	Personal.
1841.	62,063,000	36,043,600	186,350,948	64,843,672
1844.	72,048,000	46,402,300	171,936,591	64,023,456
Increase	9,985,000	10,358,700		
Decrease.			14,414,357	820,516

"We have in these figures the palpable effects of the completion of the Western railroad, upon the fortunes of Boston while New York has "remained in her shell." The difference between what New York city has lost, and Boston has gained, is \$35,000,000, and between what New York should have gained, \$50,000,000—enough to build ten railroads between here and Albany. Yet with many noble enterprises half-finished in our vicinity, no more life is apparently among moneyed men than if New York had a chartered right to all the business in the country. The wealth which Boston has acquired by her past enterprise has given her the means and the impulse to prosecute new ones. Already she is strengthening her communication with the lakes through the Ogdensburg road, by which route she will have the cheapest and shortest channel for goods to go west and produce to come east. Every western banker knows and feels daily in the character of the drafts discounted, how rapidly business connections are forming in Boston and breaking off from New York. The capital of Boston is ample to afford the greatest facilities to business, and when once the channel is open she will have the whole of it. When western connections are once formed in Boston how will they be got back? They never can be recovered. If once, through the inertness of our citizens, the trade is lost, it is lost forever.

"The receipts and expenses of the city of Boston, as compared with New York, for the year ending May, 1845, are as follows:

	Boston.	New York.
Receipts.....	\$1,078,057	\$1,536,781
Expenses.....	869,575	1,536,781
Balance on hand	130,872	

"The heads of expenditure compare as follows:

	Boston.	New York.
Watch.....	\$47,905	\$265,021
Lamps.....	24,749	146,246
Street cleaning..	41,956	121,793
" Repairs.....	38,732	33,663
Alms House.....	44,151	249,121
Police.....	9,762	35,080
Salaries.....	37,176	207,779
State tax.....	25,488	275,000

"The total expenses in Boston bears very nearly the same proportion to the assessed valuation, as do those of New York."

Canada West Railroads.—It appears by the London railway Times of 5th July that the Huron and Ontario railroad has found substantial aid in England.

Huron and Ontario Railway.—This great Canadian undertaking continues to excite attention in the city, which will, we have reason to think, be shortly increased when circumstances have transpired, to which at present we can only allude. Of course we mean the progress towards a closer union with the Canada company, who naturally ought to be the parties to project and carry out the line. The most perfect understanding at this moment exists between the companies, so that we doubt not to be able in another week to announce a board of direction strengthened by some of the first names in this city. Of this we are certain, that the shareholders of the railway company will be indebted to the promoters of this union for their ultimate success—acting in opposition to the views of the Canada company failure was inevitable.—Nothing now need retard the company from immediately following out its original scheme of a direct line from Toronto to Goderich, which is, in fact, in a national point of view, the only one deserving of English support. The Canadian papers, just received, are full of reports of public meetings at Goderich, Hamilton, and Toronto, in support of the railway, to which 25,000 were subscribed on the spot, the agent of the Canada company putting down 3,000 towards the expense of the survey.

There will be little difficulty in obtaining English capital to aid in constructing railroads in Canada. There are various reasons why it should be so; one of which is that it will be a good investment, another it will be as good as fortifications, or armies in case of war.

The Scotch Pig-Iron Trade.—The manufacture of pig-iron in Scotland says the London Mining Journal of 28th June, is steadily on the increase. In the Mining Journal, of the 7th inst., we gave a tabular statement of the number of furnaces in existence and in operation, from which it will be seen that, up to the end of May, the total number of furnaces in Scotland was 91, of which 75 were in and 16 out of blast. We now find, from the following table, that up to the end of June there are 99 built, 12 building, and 90 in blast, being an enormous increase in so short a time, and fully proves that there exist capabilities for increasing the make of iron in proportion to the demand, to an extent which some of our contemporaries have deemed impossible. We have seen it asserted, that "not another furnace could be blown in within 12 months;" yet here we have an additional number at work, capable of producing several hundred tons of pig-iron per week. That an enormous and continually increasing demand for iron, for all the great engineering works proposed, must take place there is no doubt,

but we think that it will be found that there is capital and enterprise among the iron masters equal to the emergency; it is the system of speculating on the demand, buying for the account, and not the demand itself, which has caused so much of the unpleasant consequences which have, of late years, at intervals marked the iron trade; were all transactions *bona fide* sales, and would the smaller makers abandon the often ruinous practice of taking large orders, which it is not in their power to execute, the iron trade would be as steady as any branch of commercial business—paying a good per centage for the capital invested, and supporting a very large amount of the working population in comfort and content. The following statement shows the number of blast furnaces, and weekly produce of pig-iron in Scotland, in June, 1845:

Building 12, built 99, in blast 90, weekly produce 9960 tons.

The stocks of pig-iron in Glasgow have, in fact, increased to an enormous amount, causing many to believe that the supply has outstripped the demand, but which, we believe, to be only the effect of the iron masters speculating for a rise, and when such a situation of things becomes general, however, the price might for a time be bolstered up, the "crash" must come at last. To attain permanent prosperity in so extensive a branch of industry as the iron trade, the supply should go to a certain extent hand in hand with the demand; and now that German, French, and American capitalists, are successfully improving their make, and competing with us, it is time that English and Scotch iron manufactures should take measures to secure those markets, which, by careless, and even reckless speculation, may be lost to them for ever.

LAWRENCE'S ROSENDALE HYDRAULIC Cement. This Cement is warranted equal to any manufactured in this country, and has been pronounced superior to Francis' "Roman." Its value for Aqueducts, Locks, Bridges, Floors and all Masonry exposed to dampness, is well known, as it sets immediately under water, and increases in solidity for years.

For sale in lots to suit purchasers, in tight papered barrels, by **JOHN W. LAWRENCE,** 142 Front street, New York.

Orders for the above will be received and promptly attended to at this office.

PASSENGER LINES FROM BOSTON.

Eastern Railroad.—Boston to Portland, via Salem Newburyport, Portsmouth and Saco. Trains leave daily, except Sundays. Boston for Portland 7½ a.m. and 2½ p.m.; Newburyport and Portsmouth 7½ a.m., 2½ p.m., 5½ p.m.; Salem 7½ a.m., 12½ p.m., 3½ p.m., 5½ p.m., 6½ p.m.; Salem for Marblehead 8½, 9½, 10½ a.m.; 1, 3½, 4½, 6½, 8½ p.m.

Boston and Maine railroad.—Upper route. Boston to Portland, via Charlestown, Wilmington, Andover, North Andover, Haverhill, Exeter, Dover, Somersworth, Berwick, Kennebunk, Saco, and Scarborough. Passenger trains will run daily, Sundays excepted, as follows, viz: Leave Boston for Portland at 7½ a.m. and 2½ p.m.; for Great Falls at 7½ a.m., 2½, 4½ p.m.; for Haverhill at 7½ a.m., 2½, 4½ and 6½ p.m.; leave Portland for Boston at 7½ a.m. and 3 p.m.

A special train will leave Boston for Andover at 12 p.m., and Andover for Boston at 4½ p.m.

The depot in Boston is at the corner of Canal and Traverse streets. **CHARLES MINOT,** Superintendent.

Norwich and Worcester railroad.—Accommodation trains, daily, except Sunday. Leave Norwich at 6 a.m. and 4½ p.m., leave Worcester at 10 a.m. and 4½ p.m. The morning train from Norwich, and the morning and evening train from Worcester, connect with the Boston, Western and Hartford and Springfield railroads. New York train, via steamboat, leaves Norwich for Worcester and Boston, except Monday, upon the arrival of the boat from New York, about 2 o'clock; leave Worcester for Norwich and New York at 5½ p.m. daily, except Sundays. New York train, via Long Island railroad, leaves Norwich about 3½ p.m. for Worcester and Boston daily, except Sunday; leaves Worcester for Norwich and New York at 7½ a.m. daily, except Sunday, and arrives at Norwich at 9½.

Fares are less when paid for tickets than when paid in the cars. **EMERSON FOOTE,** Superintendent.

Boston and Lowell Railroad, Summer Arrangement.—The passenger trains will run as follows: Leave Boston at 7 and 11 a.m., 2½ and 5½ p.m.; leave Lowell at 7½ and 11 a.m., 2 and 5½ p.m. Fare 75 cents.

Nashua and Lowell Railroad.—Passenger trains will run as follows: Leave Boston at 7 a.m., 11 a.m. and 5 p.m.; leave Nashua at 6½ a.m., 1½ p.m. and 4½ p.m.

Concord and Nashua Railroad.—Passenger trains run daily, Sundays excepted, in connection with the Boston and Lowell, and Nashua and Lowell railroads, as follows: Leave Boston at 7 a.m., 11 a.m. and 5½ p.m.; leave Concord at 4½ a.m., 1½ a.m. and 3½ p.m. The second train arrives in Boston in season for passengers to take the railroad train to New York. Stages, on the arrival of the first train at Concord, leave by various routes for the different parts of the state, Vermont and Canada. On the second day from Boston Stages reach Royalton, Middlebury, Montpelier and Burlington, connecting there with the steamboat line to Montreal. Stages also run from Haverhill to Stanstead and Montreal.

Woburn Branch Railroad.—Special trains will run as follows: Leave Boston at 8 and 11½ a.m., and 3 and 6½ p.m.; leave Woburn Centre at 7 and 9 a.m., and 1½ and 5½ p.m. These trains will stop for way passengers anywhere between Woburn Centre and Boston.

WALDO HIGGINSON, Agent B. & L. Railroad Co.

Fitchburg Railroad.—Leave Charlestown at 7 and 11 a.m. and 5 p.m.; leave Fitchburg at 6½ a.m. and 11 a.m. and 4½ p.m. Special trains will be run to Waltham and Concord as follows: Leave Concord for Charlestown at 7 a.m.; leave Waltham for Charlestown at 7½ a.m. and 10½ a.m., 4½ p.m.; leave Charlestown for Waltham at 9½ a.m., 3 and 6 p.m.; leave Charlestown for Concord at 6 p.m. On the arrival of the two morning trains at Fitchburg stages will leave for all the principal towns in western Massachusetts, New Hampshire and Vermont. **S. M. FELTON,** Eng. and Sup't.

Boston and Worcester Railroad.—Summer arrangement.—For Worcester and way stations at 7½ a.m., 1¾ and 5 p.m.; for Milbury at 7½ a.m. and 5 p.m.; for New York, by Norwich and steamer, 4 p.m.; day line for New York, by Long Island railroad, at 6 a.m.; for Boston and way stations at 7 and 10 a.m., 4½ p.m. Newton trains, daily, except Sunday, from Boston at 9½ a.m., 3, 5½ and 7 p.m.; from Newton at 7½ and 10½ a.m., 4 and 6 p.m.

Fares are less at the ticket offices than in the cars. **WM. PARKER,** Sup't.

Boston and Providence Railroad.—Passenger trains run as follows: For New York, night line, via Stonington; leave Boston every day, Sundays excepted, at 5 o'clock p.m.; accommodation trains leave Boston at 7½ a.m. and 4 p.m., and Providence at 8 a.m. and 4 p.m.; Dedham trains leave Boston at 8½ a.m., 12½, 3½ and 6½ p.m.; leave Dedham at 7 and 10 a.m., 2½ and 5½ p.m.; Stoughton trains leave Boston at 12 m. and 5½ p.m.; leave Stoughton at 7½ a.m. and 3 p.m. **WM. RAYMOND LEE,** Sup't.

Western Railroad.—Summer arrangement.—Passenger trains leave daily, Sundays excepted, as follows: Boston 7½ a.m. and 4 p.m. for Albany; Albany 6¾ a.m. and 2½ p.m. for Boston; Springfield 7 a.m. and 1 p.m. for Albany; Springfield 7 a.m. and 1½ p.m. for Boston. For Albany and Buffalo—Leave Boston at 7½ a.m., arrive at Albany at 6 p.m.; leave Albany at 8 p.m. for Buffalo, or at 7½ o'clock next morning. For Montreal—Passengers proceed from Albany to Troy, thence by railroad and canal to Whitehall, and thence by the commodious steamers of lake Champlain (stopping at Burlington) to St. Johns, thence by railroad to La Prairie, and thence by steam to Montreal. New York, via Hartford and New Haven; day route—Leave Boston at 4 p.m., lodge at Springfield or Hartford; leave Springfield at 9½ a.m., and arrive in New York at 6 p.m. Passengers may also leave Boston at 7½ a.m., proceed at 1 or 4½ p.m. from Springfield to New Haven; leave New Haven at 10 p.m. and arrive in New York at 6 o'clock next morning.

For further information apply to Charles A. Read, agent, 27 State street, Boston.

JAMES BARNES, Superintendent and Engineer.

Taunton Branch and New Bedford and Taunton Railroads.—Trains leave Boston for Taunton and New Bedford at 7½ o'clock a.m. and 4 p.m.; leave Providence for Taunton and New Bedford at 8 o'clock a.m. and 4 p.m.; leave New Bedford for Boston and Providence at 7½ o'clock a.m. and 3½ p.m.; leave Taunton for Boston and Providence at 8½ o'clock a.m. and 4½ p.m.; leave Taunton for New Bedford at 9 o'clock a.m. and 5½ p.m. Afternoon trains connect with Stonington cars and steamers for New York. Morning cars connect with the Long Island train on Monday, Wednesday and Friday. **W. A. CROCKER,** General Superintendent.

Fall river Branch Railroad.—Trains leave Boston for Fall River daily, Sundays excepted, at 7½ a.m. and 4 p.m.; trains leave Fall River for Taunton, Boston and Providence at 7½ a.m. and 3 p.m.; trains leave Fall River for New Bedford at 7½ and 9 a.m., and 5½ p.m.

For Newport.—Passengers from Boston to Newport will find stages in readiness on the arrival of the morning cars at Fall River to take them onward. Fare through \$2. Tickets for the stage will be furnished by the conductor on the Fall River Branch Road.

Stages also leave Fall River at 1 o'clock p.m., for Tiverton, Four Corners, Adamsville and Little Compton. **SAM'L H. P. LEE, Jr.,** Superintendent.

TO RAILROAD COMPANIES AND MANUFACTURERS OF railroad Machinery. The subscribers have for sale Am. and English bar iron, of all sizes; English blister, cast, shear and spring steel; Juniata rods; car axles, made of double refined iron; sheet and boiler iron, cut to pattern; tiers for locomotive engines, and other railroad carriage wheels, made from common and double refined B. O. iron; the latter a very superior article. The tires are made by Messrs. Baldwin & Whitney, locomotive engine manufacturers of this city. Orders addressed to them, or to us, will be promptly executed.

When the exact diameter of the wheel is stated in the order, a fit to those wheels is guaranteed, saving to the purchaser the expense of turning them out inside.

THOMAS & EDMUND GEORGE, ja45 N. E. cor. 12th and Market sts., Philad., Pa.

FOR SALE, AT A SACRIFICE.—A LOCOMOTIVE Engine, 4 wheels and Tender. Cylinders 10 in. dia., Stroke 16 in., Cylinders inside of smoke box. Weight of engine, with wood and water, about 9 tons. This engine and tender are new, and of the best materials and workmanship. If required, would be altered to a 6 wheeled engine.

Also, 1 20-horse High Pressure Steam Engine. 2 8-horse " " " " 1 Upright Hydraulic Press.

All of which will be sold low, on application to **T. W. & R. C. SMITH,** Founders and Machinists.

May 13th Alexandria, D. C.

FROM PHILADELPHIA PASSENGER LINES NORTH AND EAST.

Camden and Amboy Line.—By Railroad and Steamboat from Amboy. Leave foot of Walnut street daily, Sundays excepted, at 8 a.m. Fare \$3. Forward deck \$3 25. Also for New York, by way of Trenton, Princeton, New Brunswick, Elizabethtown and Newark, N.J., daily from foot of Walnut street, at 9 a.m., and 5 p.m.—Fare \$4. 31

For Reading and Pottsville. By Reading Railroad. Daily, Sundays excepted, from the Depot, corner of Broad and Cherry streets at 8 a.m. Fare, \$3 50. Second class, \$3. To Reading \$2 25. Second class \$1 90. 31

For Mauch Chunk and Wilkesbarre.—By Express and Reliance Line. Daily, from the corner of Broad and Cherry streets, at 9 a.m. 31
PETERS, MILTIMORE & CO.

For Easton and Bethlehem. By Post Coaches. Leave the Office, next door to the White Swan, Race street, daily, at 4 a.m. 31
PETERS, HAMMIT & CO.

For Baltimore. By Railroad. Fare \$2. Via Chester, Wilmington, Elkton, Havre de Grace. Leave Philadelphia, Depot, 11th and Market street, daily, Sundays excepted, at 8 a.m., 4 p.m. Leave Baltimore, Depot, Pratt street, daily, Sundays excepted, at 9 a.m., 8 p.m. Tickets through to Wheeling and Pittsburg can be procured at the Depot. 31

Wilmington Accommodation Line, leaves the Depot, 11th and Market sts. daily, except Sunday, at 10 a.m. and 4 p.m. Leaves Wilmington at 7 a.m. and 4 1/2 p.m. G H HUDDLE, Agent. 31

For Baltimore. By Newcastle & Frenchtown Railroad and Steamboat Line. Fare \$1. The Steamboat Robert Morris, Capt. J. M. Douglass, leaves Dock street wharf daily, except Sunday, at 3 o'clock. Passengers by this line will reach Baltimore at about 10 p.m. Tickets through to Wheeling or Pittsburg can be procured on board the boat. G H HUDDLE, Agent. 31

For Baltimore, via Lancaster, Columbia and York. By the Susquehanna Railroad, daily, Sunday excepted, leave the Depot 274 Market st., at 7 1/2 a.m., and 12 at night, for Columbia, and leave Columbia at 2 p.m. for Baltimore. Dine at York and arrive in Baltimore in time for early tea; passing through the most highly cultivated and beautiful part of Pennsylvania, and romantic part of Maryland. 31

For Pittsburg, via Columbia and Lancaster Railroads. Leave the Depot 274 Market st. daily, at 7 1/2 a.m. The Night Line will leave as usual at 12 midnight. At Harrisburg this line connects with the Railroad and Stage Line for Carlisle, Chambersburg and Pittsburg, with the Packet boats for Lewistown, Huntingdon, Hollidaysburg and Pittsburg; also with the Susquehanna Packet boats to Northumberland, Milton, Muncy, Williamsport, etc. Through tickets for any for any of the above places can be secured at the depot, where every information relative to the above lines will be given. Passengers for York and Gettysburg will leave in the 7 1/2 line. JACOB PETERS & CO. 31

For Pittsburg. By the Pioneer and Express Packet Line. Leave the Depot, 274 Market st. above 8th, at 7 1/2 a.m. By this route travellers may be assured of a safe and comfortable passage, every arrangement having been made for their accommodation. Office N. E. 4th and Chestnut sts. Seats may also be procured at the Depot, and at 13 South 3d st. A CUMMINGS, Agent. 31

Susquehanna Line of Railroad Cars and Post Coaches. This line leaves the depot, corner of Broad and Cherry streets, daily, [Sundays excepted] at 8 o'clock, a.m., via Reading and Pottsville railroad, for Sunbury, Danville, Cattaugus, Northumberland, Milton, Muncy, Williamsport, Towanda, Bellefonte, Jersey Shore, Lockhaven, Ralston and Elmira. For seats apply at the stage office, 104 Race street, under the White Swan Hotel. 34
S. STILES, Agent.

FROM BALTIMORE. PASSENGER LINES SOUTH AND WEST.

Baltimore and Ohio Railroad.—For Cumberland, Hancock, Martinsburg, Harper's Ferry, Winchester, Frederick, Ellicott's Mills, and intermediate depots by the regular train, daily, at 7 1/2 o'clock, a.m. For Frederick and intermediate stations, by extra train, daily, except Sunday, at 4 p.m. 31

Fare in either direction between Baltimore and Cumberland \$7, and for intermediate distances at the uniform rate of 4 cts. per mile. Through tickets are issued between Baltimore and Wheeling respectively, \$11. Between Baltimore and Pittsburg, \$10. Between Philadelphia and Wheeling \$13. 31
D. J. FOLEY, Agent.

For Washington. From Baltimore at 9 o'clock, a.m.; 5 p.m.; and 11 1/2 p.m. By order, 31
D. J. FOLEY, Agent.

SUMMER ARRANGEMENT—FARE REDUCED.

By the Great Southern Mail Line, via Washington City, and the only line that now issues through tickets south, to Weldon and Charleston, S. C., whereby the traveller gains 24 hours in advance of those who take the Bay route. This is the only line that carries the great southern mail to Richmond, Petersburg, Weldon, and Charleston, S. C. 31

Direct to New Orleans, and at the following reduced rates of fare, viz: Through tickets from Baltimore to Charleston, \$31; whereby the traveller saves \$4 25. Bear in mind that this is the great Southern Mail Line, and the only one that issues a through ticket South. Those who patronize it will save their money and time. Through Tickets from Baltimore to Charleston \$31; Baltimore to Weldon \$10; Baltimore to Petersburg \$7 50; Baltimore to Richmond \$7. 31

Fast Mail Line.—Leave New York at 9 a.m. and arrive in Philadelphia at 3 1/2 p.m.; arrive in Baltimore at 11 p.m.; arrive in Washington at 3 a.m.; arrive in Fredericksburg at 9 a.m.; arrive in Richmond, Va., at 12 1/2 to 1 p.m.; arrive in Petersburg, Va., at 3 p.m.; arrive in Weldon, N. C., at 10 p.m.; arrive in Wilmington, N. C., at 12 m.; arrive in Charleston, S. C., at 6 a.m. 31

Passengers by the above line will arrive at Richmond by 11 1/2 o'clock p.m. and Petersburg, Va. by 2 1/2 o'clock p.m., through to the former city in twelve hours, and to the latter in fourteen and a half hours, (and in eight hours less time than by the Bay route,) and to Charleston, S. C., in fifty-one to fifty-two hours after leaving Baltimore, and do not incur the risk of any detention at intermediate points as those do who take the Bay route. 31

Way Mail Schedule.—Leave New York at 5 o'clock p.m. and arrive in Philadelphia at 10 p.m.; arrive in Baltimore at 2 1/2 p.m.; arrive in Washington at 7 p.m. From Philadelphia by steamboat.—Leave Philadelphia at 6 a.m. and arrive in Baltimore at 1 p.m.; leave Baltimore at 5 p.m. and arrive in Washington at 7 p.m. 31

For further information and through tickets apply at the Southern office, adjoining the Washington railroad ticket office, Pratt street, Baltimore. 31
STOCKTON & FALLS.

For Norfolk and the South, by steamboat through the Chesapeake bay to Norfolk, and then by railroad to Weldon, Wilmington or Raleigh, etc. Leaves Baltimore daily [except Sundays] from Spears' wharf, at 4 p.m., and arrives at Norfolk next morning at 7 o'clock; fare \$6. Leaves Norfolk at 8 a.m. and arrive at Wilmington next day at 12 m. and Charleston next morning at 7. Fare through \$21. 31

For Philadelphia (Union Line), via Chesapeake and Delaware Bay, and Newcastle and Frenchtown Railroad.—The well known steamboat Constitution, Capt. Chaytor, has commenced her regular trips for the season, leaving Bowly's wharf, foot of South street, at 8 o'clock, p.m. daily [except Sundays] for Philadelphia. Through in 8 hours. Fare \$3. 31

Morning Train for Philadelphia.

The morning train leaves the depot, Pratt street, daily [except Sundays] at 9 o'clock, a.m. Passengers arrive at Philadelphia in full time to continue on by the mail train for New York. Fare \$3. Sunday evening Mail Train—the only line that departs from Baltimore on Sundays for Philadelphia, is the mail train which leaves Pratt street depot, at 8 p.m. Fare \$3. 31

For Philadelphia, via York, Columbia and Lancaster, by the Baltimore and Susquehanna railroad. Cars leave from their office, 63 North street, daily [Sundays excepted] at 9 o'clock, a.m. Fare \$3 50. 31

GEORGE VAIL & CO., SPEEDWELL IRON Works, Morristown, Morris Co., N. J.—Manufacturers of Railroad Machinery; Wrought Iron Tires, made from the best iron, either hammered or rolled, from 1 1/2 in. to 2 1/2 in. thick.—bored and turned outside if required. Railroad Companies wishing to order, will please give the exact inside diameter, or circumference, to which they wish the Tires made, and they may rely upon being served according to order, and also punctually, as a large quantity of the straight bar is kept constantly on hand.—Crank Axles, made from the best refined iron; Straight Axles, for Outside Connection Engines; Wro't. Iron Engine and Truck Frames; Railroad Jack Screws; Railroad Pumping and Sawing Machines, to be driven by the Locomotive; Stationary Steam Engines; Wro't. Iron work for Steamboats, and Shafting of any size; Grist Mill, Saw Mill and Paper Mill Machinery; Mill Gearing and Mill Wright work of all kinds; Steam Saw Mills of simple and economical construction, and very effective iron and Brass Castings of all descriptions. ja451y

NICOLL'S PATENT SAFETY SWITCH for Railroad Turnouts. This invention, for some time in successful operation on one of the principal railroads in the country, effectually prevents engines and their trains from running off the track at a switch, left wrong by accident or design. 31

It acts independently of the main track rails, being laid down, or removed, without cutting or displacing them. 31

It is never touched by passing trains, except when in use, preventing their running off the track. It is simple in its construction and operation, requiring only two Castings and two Rails; the latter, even if much worn or used, not objectionable. 31

Working Models of the Safety Switch may be seen at Messrs. Davenport and Bridges, Cambridgeport, Mass., and at the office of the Railroad Journal, New York. 31

Plans, Specifications, and all information obtained on application to the Subscriber, Inventor, and Patentee. G. A. NICOLLS, Reading, Pa. 31

MACHINE WORKS OF ROGERS, KETCHUM & GROSVENOR, PATTERSON, N. J. The undersigned receive orders for the following articles, manufactured by them of the most superior description in every particular. Their works being extensive and the number of hands employed being large, they are enabled to execute both large and small orders with promptness and despatch. 31

Railroad Work. Locomotive steam engines and tenders; Driving and other locomotive wheels, axles, springs & flange tires; car wheels of cast iron, from a variety of patterns, and chills; car wheels of cast iron with wrought tires; axles of best American refined iron; springs; boxes and bolts for cars. 31

Cotton, Wool and Flax Machinery of all descriptions and of the most improved patterns, style and workmanship. Mill gearing and Millwright work generally; hydraulic and other presses; press screws; callenders; lathes and tools of all kinds; iron and brass castings of all descriptions. 31

ROGERS, KETCHUM & GROSVENOR, a45 Paterson, N. J., or 60 Wall street, N. York.

RAILROAD IRON AND FIXTURES. THE Subscribers are ready to execute orders for the above, or to contract therefor, at a fixed price, delivered in the United States. 31

DAVIS, BROOKS & CO., 21 Broad st., N. York. ja45

FROM NEW YORK.

New York and Harlem Rail-

road Company.

Leave City Hall for Yorkville, Harlem and Morrisania at 5.30, 7, 8, 9, 10, a.m.; 1, 2, 3, 3.30, 4, 5, 5.30, 6, p.m. For Fordham and Williams' Bridge at 5.30, 7, 10, a.m.; 2, 3.30, 5, 6, p.m. For White Plains at 7 and 10 a.m.; 2 and 5 p.m. Leave Morrisania and Harlem for City Hall at 6.20, 8, 9, 10, 11, a.m.; 2, 3, 4, 2, 5.20, 6, 6.30, 7.45 p.m. Williams' Bridge for City Hall at 7, 7.40, 10.40 a.m.; 2.40, 5, 5.40, 7.20 p.m. White Plains for City Hall at 7.10 and 4.10 a.m.; 2.10 and 5.10 p.m. 31

New York and Erie Rail-

road Line.

For Middletown, Goshen, and intermediate places. Two daily lines each way, as follows:—For passengers.—The new, fast and commodious steamboat St. Nicholas, Capt. Alex. H. Shultz, will leave the foot of Duane street daily, [Sundays excepted,] at 7 o'clock, A.M., and 4 o'clock, P.M., through in five hours. Returning, the cars will leave Middletown at 6, A.M., and 4, P.M. For further particulars inquire of J. Van Rensselaer, Agent, corner of Duane and West streets.

H. C. SEYMOUR, Superintendent.

Stages run from Middletown daily, in connection with the afternoon line, to Bloomingburg, Wurtsboro, Monticello, Mt. Pleasant, Binghamton, Owego, Port Jervis, Honesdale, Carbondale, etc.

On Monday, Wednesday, and Friday, to Dundaff, Montrose, Friendship, Lenox, Brooklyn, etc., etc. 31

PASSENGER LINES FOR THE NORTH AND WEST.

Morning Line, at 7 o'clock.—For Albany, Troy, and intermediate landings.—The steamboat Troy, Capt. A. Gorham, will leave New York, foot of Barclay street, at 7 o'clock, A.M., every Tuesday, Thursday, and Saturday. The steamboat Niagara, Capt. DeGroot, leaves New York at 7 o'clock, A.M. Monday, Wednesday, and Friday. 31

Afternoon, or 5 and 7 o'clock Line.—At 5 o'clock, P.M., landing at intermediate places, from the foot of Barclay street.—The steamboat New Jersey, Capt. H. H. Fury, will leave on Monday, Wednesday, Friday, and Sunday. The steamboat South America, Capt. M. H. Truesdell, will leave on Tuesday, Thursday, and Saturday. For passage or freight apply on board, or to

P. C. SCHULTZ,

At the office on the wharf. Evening, or 7 o'clock Line.—Line steamboats for Albany.—Daily, Sundays excepted.—Through direct at 7 o'clock P.M. from pier between Courtlandt and Liberty streets.—Steamboat Rochester, Capt. R. G. Crittenden, will leave on Monday, Wednesday, and Friday. Steamboat Knickerbocker, Captain A. Houghton, will leave on Tuesday, Thursday, and Saturday. 31

For Albany and Troy, direct, at 7 o'clock, P.M., from the steamboat pier, foot of Courtlandt street. The Empire, Capt. R. B. Macy, Tuesday, Thursday and Saturday. The Columbia, Capt. Wm. H. Peck, Monday, Wednesday, and Friday. 31

Troy and Greenbush Railroad.

Leave Troy, at 6 o'clock, A.M., to Boston and Albany; 8, do, do, do; 10, do, do, do; 2, P.M., to Boston and Albany; 4, do, do, do. Leave Albany at 7 o'clock, A.M.; 9, do, do; 12, M., or on arrival of the Boston train; 3, P.M.; 6, P.M., or on arrival of the Boston train.—Fare, 12 cents.

Passengers at Albany should procure tickets at the Boston railroad office, foot of Maiden lane. 31

L. R. SARGENT, Superintendent.

Schenectady and Troy railroad cars leave as follows:—From Troy, 7 o'clock, A.M., daily; 1, P.M., daily, except Sundays; 7, do, daily. From Schenectady, 3 o'clock, A.M., daily; 9, do, do, except Sundays; 3, do, daily.

Persons going to Saratoga and north should take the 7, A.M., train; and passengers going west of Schenectady, the 7, A.M., or 7, P.M., trains. 31

L. R. SARGENT, Superintendent.

Troy, Ballston, and Saratoga Railroad.—The cars of this road will run as follows:—Leave Troy at 8 o'clock, A.M., daily, do, do, 3, P.M., except Sundays; leave Saratoga at 9, A.M., except Sundays; do, do, 3, P.M., daily.

L. R. SARGENT, Superintendent.

Lake Champlain Steamboats.—From Whitehall to Burlington and St. John's.—Morning Line on Lake Champlain, making intermediate landings.—Passage \$2, breakfast on board.—The Francis Saltus, Capt. H. G. Tisdale, leaves Whitehall, Tuesdays, Thursdays, and Saturdays, at 6 o'clock, a.m., and St. John's Mondays, Wednesdays, and Fridays, at 6 o'clock, a.m. For freight or passage apply to the captain on board. H. D. FILKINS, Agent, Troy. 31

Passengers leaving Troy, Mondays, Wednesdays, and Fridays, at half-past 3 o'clock, p.m., by railroad and packet, will arrive at Whitehall in time for the above boat next morning. 31

PASSENGER LINE EASTWARD.

Long Island Railroad.

Company.—Trains run from Brooklyn depot.—Boston train, 8, a.m., daily, stopping at Farmingdale and St. George's Manor; accommodation train, 9, a.m., and 5 p.m., for Farmingdale and intermediate places, daily; accommodation train, 3, p.m., for Greenport, daily, stopping at Jamaica, Branch, Hempstead, and Hicksville, and all the stopping places between Hicksville and Greenport. From Greenport depot: Boston train, daily, at 12 o'clock, m., or on the arrival of steamers from Norwich. Accommodation train at 5, a.m., daily, for Brooklyn and intermediate places. From Farmingdale depot: Accommodation train at 6, a.m., and 2, p.m., daily, for Brooklyn and intermediate places.

The steamboat Statesman leaves Greenport for Sag Harbor twice each day, on arrival of the trains from Brooklyn.

Baggage crates will be in readiness, at the foot of Whitehall street, to receive baggage for the several trains, 30 minutes before the hour of starting from the Brooklyn side. 31

Regular Mail Line between New York and Boston, via Stonington, Providence, and Newport, composed of the following steamers, running in connection with the Stonington and Providence railroads, and the Boston and Providence railroad: Massachusetts, Capt. Comstock; Mohegan, Capt. —; Narragansett, Capt. Manchester; Rhode Island, Capt. Thayer. Via Stonington, daily, [except Sundays,] at 6 o'clock, p.m., from New York, and from Stonington on the arrival of the mail train, which leaves Boston at 5 p.m., and Providence 6, p.m. The Rhode Island on Mondays, Wednesdays, and Fridays; the Narragansett on Tuesdays, Thursdays, and Saturdays. Via Newport, the Massachusetts leaves New York for Newport and Providence, direct, on Tuesdays, Thursdays, and Saturdays, at 5 o'clock, p.m. 31

New York and Boston Railroad Line, via Norwich and Worcester, daily, from pier No. 1, North river, at 6 o'clock, p.m. The Worcester, Captain Bacon, on Tuesdays, Thursdays, and Saturdays. The Cleopatra, Capt. Dustan, on Mondays, Wednesdays, and Fridays.

Passengers, on the arrival of the steamers at Allen's Point, will be immediately forwarded in the splendid and commodious cars of the railroad to Boston, without change of cars or baggage. 31

For Newport and Providence, on Monday, Wednesday, and Friday. This line leaves at 8 o'clock, in the morning, from the foot of Whitehall street, South ferry. 31

U. S. Mail Line for New Haven, Hartford, and Springfield, from Peck Slip, East river, daily, at 6, a.m., by steamboat New Champion, Captain Joel Stone, connecting with the cars at New Haven, for Hartford and Springfield. Night line for New Haven: The steamboat Hero, Capt. Richard Peck, leaves on Tuesdays, Thursdays, and Saturdays, at 4, p.m. For Hartford, direct, daily, [Sundays excepted,] at 4, p.m.—The steamboat Kosciuszko, Capt. Le Fevre, every Tuesday, Thursday, and Saturday, and the Globe, Capt. E. D. Roach, will leave every Monday, Wednesday, and Friday. 31

Hoosatic Railroad, Bridgeport and New York.—The steamboat Mutual Safety, Capt. J. B. Lober, leaves New York, from the foot of Market street, every morning, [Sundays excepted,] at 6 o'clock, arriving in Bridgeport at 11 o'clock. Returning, leave Bridgeport at 11, p.m., on the arrival of the cars, arriving in New York at 5 o'clock. The Nimrod, Capt. J. Brooks, Jr., leaves New York daily, at 2, p.m., and Bridgeport 7, a.m. There are no train of cars running in connection with any boat except the Mutual Safety until further notice.

Tickets, if not purchased at the offices on the line of the road, or on board of the boat, will be charged at advanced prices. Dated tickets positively taken only on the day specified. R. B. MASON, Superintendent. 31

PASSENGER LINES, SOUTH AND SOUTHWEST.

New York and Philadelphia Rail-

road Line.—Direct. Leaves New York daily, from the foot of Liberty street. Morning Line, 9 o'clock, A.M. Mail Pilot Line, 4 o'clock, P.M. Fare in first class cars, \$4. Second class cars, \$3.

Passengers will procure their tickets at the office foot of Liberty street. Philadelphia Baggage Carts are conveyed from city to city without being opened by the way. Each train is provided with a car, in which are apartments and dressing rooms expressly for the Ladies' use. 31

Camden and Amboy Railroad

Line.—For Philadelphia

and intermediate places. Leaves Pier No. 2, North River, foot of Battery Place, by Steamboat to South Amboy, daily, Sundays excepted, at 5 o'clock A.M. Passengers will take the cars at South Amboy. Fare to Philadelphia, \$3. Forward deck passengers, \$2.25. To Freehold and Monmouth, via stages from Hightstown, \$1.50. To Spotswood and West 75 cents. To South Amboy, 25 cents. To Perth Amboy, Tattens, Rossville and Tufts, 125 cents.

The steamboat Independence will land at each of the above named places going and returning, leaving Perth Amboy at 5 o'clock P.M. 31

New Jersey Railroad and

Transportation Company.—For

Newark. Fare 25 cents. Leave New York at 8, 9, and 11 o'clock A.M., and 12, 2, 3, 4, 6, 8, and 9 o'clock P.M. Leave Newark at 7, 7, 8, 9, 10, A.M., and 1, 4, 5, 7, 9, P.M. On Sundays, leave New York at 9 A.M., and 4 P.M. Leave Newark at 11 A.M., and 9 P.M.

For Elizabethtown. Fare 34 cents. Leave New York at 9 A.M., 12, 2, 4, 6, P.M. Leave Elizabethtown at 7, 7, 8, 10, A.M., 3, 6, 9, P.M.

For Rahway. Fare 34 cents. Leave New York at 9 A.M., 12, 2, 4, 6, P.M. Leave Rahway at 5, 7, 7, 11, A.M., 3, 6, 9, P.M.

For New Brunswick. Fare 50 cents. Leave New York at 9 A.M., 4, 4, P.M. Leave New Brunswick at 5, 7, 11, A.M., 8, P.M. On Sundays, leave New York at 9 A.M., and 4 P.M. Leave New Brunswick at 12 M., and 8 P.M.

The commutation fare between New York and New Brunswick and intermediate places, including the ferry, \$65 per annum. 31

Paterson Railroad. Leave

New York, 9, A.M., 12, 5, P.M.

Leave Paterson, 8, 11, A.M., 4 P.M. On Sundays, leave New York 9, A.M., 5, P.M. Leave Paterson, 8, A.M., 4, P.M. Passengers are advised to be at the ferry a few minutes before the stated hour of departure. Office 75 Courtland street. 31

Morris and Essex Railroad.

Leave New York, 8 a.m., 4 p.m.

Leave Newark, 9 a.m., 5 p.m. Leave Morristown, 7 a.m. 3 p.m. Passengers by the morning train to Morristown, will arrive there at 10 o'clock, where stages will be in readiness to convey them to Schooley's Mountain, Washington, Belvidere and Easton, daily; to Succasunna, Stanhope, Newtown, Milford and Owego on Mondays, Wednesdays and Fridays; and to Rockaway, Dover, Sparta and Newton on Tuesdays, Thursdays and Saturdays. Passengers from Morristown will arrive in Newark in time to take the morning and afternoon trains from Trenton and Philadelphia. 31